

PURCHASING

TWYFORD



Class HF 5437

Book .T8

Copyright N^o 1924

COPYRIGHT DEPOSIT

PURCHASING
ITS ECONOMIC ASPECTS
AND PROPER METHODS

BY THE SAME AUTHOR

A COMPANION VOLUME

STORING
ITS ECONOMIC ASPECTS
AND PROPER METHODS

215 Pages 6 × 9 Postpaid \$3.50
96 Illustrations and Forms

PURCHASING

ITS ECONOMIC ASPECTS
AND PROPER METHODS

*arry
saumont*
BY

H. B. TWYFORD

IN CHARGE OF PURCHASING AND STORING
NICHOLS COPPER COMPANY, NEW YORK

AUTHOR OF "STORING; ITS ECONOMIC ASPECTS AND PROPER METHODS"

WITH
CHARTS, DIAGRAMS AND FORMS

SECOND EDITION



NEW YORK
D. VAN NOSTRAND COMPANY
EIGHT WARREN STREET
1924

8 4 00

HF 5437
T 8
1924

COPYRIGHT, 1915
BY H. B. TWYFORD

COPYRIGHT, 1924
BY D. VAN NOSTRAND COMPANY

All rights reserved, including that of translation
into the Scandinavian and other foreign languages.

FIRST EDITION

First Printing June, 1915
Second " Aug., 1915
Third " March, 1919
Fourth " Dec., 1919

SECOND EDITION

First Printing Sept., 1924



PRINTED IN THE U.S.A.

DEC 29 '24

©C1A814421

W. J. F. 11 29 Dec. 30 - 24

ACKNOWLEDGMENT

The author acknowledges with appreciation the courtesy extended to him by manufacturers and Purchasing Agents whose purchasing forms are exhibited in this book.

PREFACE

EVERY business establishment in the normal course of its operations has to make expenditures for various purposes to maintain its active existence. Divergent views exist as to the relative importance of these outlays. This is evidenced by the preponderance of educational efforts directed towards obtaining better results from the amounts expended for labor and selling expense, while other subjects are comparatively neglected or receive insufficient consideration. These studies in economics are having far reaching effects and it is the object of this book to draw the attention to a subject which has been but little touched upon in existing literature — the economies which can be effected by the use of efficient methods in the purchasing of materials, goods, and supplies.

Purchasing is one of the primary functions in the activities of the great complex structure we call business. The acquisition of raw material is the initial step incurred in the cost of manufacturing anything. In merchandising, a purchase must be made before a sale can be effected. In construction work, tools and equipment must be procured before workmen can commence operations. The significance of this subject is brought forcibly to the attention when it is realized that every undertaking in its inception involves the necessity of buying something, and the continuance of its activities perpetuates this important function.

It is easily conceivable that promiscuous buying would be a serious handicap to the success of any concern. It would render complete success unattainable, and the very existence of an establishment might be endangered and jeopardized. For the efforts of any organization to culminate in the most desirable fruition, it is a predominant constituent principle that its expenditures be properly regulated and made with wisdom, intelligence, and sagacity.

Among the most prominent characteristics which produced the commercial prosperity of this country were: large areas of fertile lands, enormous deposits of metals and minerals, and an enthusiastic and ambitious people. There are today three other factors which make necessary a thoughtful consideration of the future. These are: conservation of natural resources, competition, and the tendency to take life easier as evidenced by the agitation for shorter hours for workmen and longer week ends for employers.

The cumulative effect of these conditions has brought intensive economical operation into prominence, and it is apparent that this must be applied to every phase of business to a greater degree as time goes on. Regulated and right buying is a study in economics, and vast savings can be effected by efficient and proper methods of performing this vital function.

During a period when I was associated with one of his enterprises, an American financier with an international reputation, who was well known for the successes he had achieved in various undertakings, expressed some opinions to me on buying and the economic objects to be attained by proper methods.

Among other things, he said that his experience had taught him that the problem of spending money judiciously and to good purpose was a harder and more difficult task than the acquisition of it. At that time some of his views were novel to me and since they were the cause of considerable reflection on my part, they were possibly the nucleus of thoughts which eventuated in this effort.

He steadfastly held to the principle that a successful foundation for new enterprises, the growth of established undertakings, and the accretion to their resources is in a large measure dependent on the importance attached to, and the careful thought given to, the expenditure of all money for capital purposes, production, and supplies. He was unflagging in diligently scrutinizing and carefully weighing such expenditures, having in view the object to be attained and the practical utility of the result to be accomplished by the outlay.

Personal experiences and struggles with the problems connected with purchasing materials, merchandise, supplies, and equipment, and in organizing and conducting this department of commercial life, together with a close study of the interesting economic questions connected with it, are combined and represented in this book. It is hoped that some of the observations made or the information given may be of service and value to the reader.

H. B. TWYFORD

NEW YORK CITY,
April, 1915.

FOREWORD TO SECOND EDITION

IN reprinting the present edition, an entirely new chapter has been added on the Legal Aspects of Purchasing, and a large number of new forms have been inserted. These latter have been gleaned from those concerns whose purchasing practice embodies the latest developments. It is hoped that these features will be useful and attractive to the student of this interesting subject.

H. B. TWYFORD.

September, 1924.

CONTENTS

PURCHASING

CHAPTER I

PRINCIPLES OF PURCHASING. GENERAL CONSIDERATIONS

The art of buying. Philosophy of buying. Personality in buying. Some present-day methods. Purchasing an interesting economic problem	1
--	---

CHAPTER II

FUNCTIONAL POSITION OF PURCHASING CONSIDERED

Importance of good buying to the success of an undertaking. Relation of buying to cost and selling. Influence of buying on profits. Literature on the subject	11
---	----

CHAPTER III

ETHICS OF BUYING

Ethical standards in purchasing. Buyer and seller. Misrepresentation and its results. Contracts and price fluctuations. Competitive bidding. Advantage of prompt payments. The offer system	19
---	----

THE PURCHASING ORGANIZATION

CHAPTER IV

THE PURCHASING AGENT

Factors and conditions connected with his work. Information and knowledge which he must possess. The principal functions covered by his activities. His authority defined. Relations with other department heads	26
--	----

CONTENTS

CHAPTER V

THE PURCHASING DEPARTMENT

Its sphere of usefulness. Size of department. Employees necessary. Relations with other departments. Subdividing the department. Traffic division. Inspecting. Receiving and storing. 41

CHAPTER VI

ORGANIZATION OF DEPARTMENT

Organization of personnel. Linking up the employees. Information clerk. Requisition clerk. Price clerk. Order clerk. Inspectors. Invoice clerks. Traffic clerk. Storekeeper . . . 53

CHAPTER VII

SYSTEM OF PROCEDURE

General outline. Procedure to be followed in collecting information. Purchasing procedure. Invoice procedure. Stores procedure. Inspection procedure. Traffic procedure 62

OPERATION OF PURCHASING DEPARTMENT

CHAPTER VIII

OBTAINING AND TABULATING PROPER RECORDS

Collecting and recording data and information. Catalogues. Sources of supply. Record of past purchases. The purchase record. Prices and quotations. Specifications. Inspection reports. Analyses and tests 73

CHAPTER IX

WORK CONNECTED WITH REQUISITIONS

Examining and checking requisitions. Pricing requisitions. Obtaining quotations. Final negotiations 95

CHAPTER X

WORK CONNECTED WITH ORDERS

Method of handling. Following up orders. Tickler systems. Recording shipments. Emergency orders 114

CONTENTS xi

CHAPTER XI

INVOICES AND METHOD OF HANDLING

General considerations. Recording invoices. Preliminary work. Checking with order. Checking with material received. Checking prices. Freight charges. Extensions. Classifica- tion. Approval	146
---	-----

CHAPTER XII

OPERATION OF STORES

General remarks. Receiving material and supplies. Properly storing. Delivering from stores. Stores accounting. Stores tickler systems. Scrap. Fixing the maximum and minimum	167
--	-----

CHAPTER XIII

The legal aspects of purchasing with a discussion of some purchasing problems	203
--	-----

PURCHASING AS PRACTISED

CHAPTER XIV

PURCHASING FOR A MANUFACTURING AND CONSTRUCTION COM- PANY	213
--	-----

CHAPTER XV

PURCHASING FOR CONSTRUCTION AND OPERATION IN WIDELY SEPARATED LOCALITIES	224
---	-----

CHAPTER XVI

PURCHASING FOR A SMALL MANUFACTURING ESTABLISHMENT . .	242
INDEX	255

LIST OF CHARTS, DIAGRAMS AND FORMS

FIGURE NO.	PAGE
1. Comparison of consequences resulting from inefficient buying and competent buying	3
2. Diagram illustrating the building up process of the cost of an article until the selling price is reached	13
3. Diagrammatic synopsis of the various matters on which a purchasing agent should be posted	30
4. Diagram showing in tabular form the main divisions of a purchasing agent's work	35
5. Chart of the functional organization of a purchasing department	48
6. Chart of the organization of personnel of a purchasing department	57
7. Chart of system to be followed in obtaining and recording data and information.	66
8. Chart of procedure to be followed from time requisition is received until order is completed	67
9. Chart of method of procedure for invoices	68
10. Chart of stores procedure	70
11. Arrangement of shelves for catalogues	76
12. Card for indexing catalogues under name of material	77
13. Card for indexing catalogues under name of manufacturer	78
14. Sketch of bookcase for catalogues	79
15. Form for keeping record of sources of supply	81
16. Record of material purchased form	83
17. Record of material purchased form	84
18. Purchase record form	86
19. Purchase record form	88
20. Record of quotations form	90
21. Supply record	94
22. Purchase requisition	96
23. Purchase requisition	97
24. Purchase requisition	99
25. Tabulation of bids	100
26. Refinery requisition	102

27. Form of inquiry for obtaining quotations	104
28. Requisition on purchasing department	105
29. Requisition for general supply	106
30. Form for obtaining quotation	107
31. Request for quotation	108
32. Telephone request for quotation	109
33. Comparison of quotation	111
34. Form of circular letter	112
35. Form of order	117
36. Form of order	118
37. Purchasing department	119
38. Purchasing department	121
39. Order form, Richmond Radiator Co.	122
40. Order form, Neptune Meter Co.	123
41. Purchasing department	124
42. Purchasing department	124
43. Post-card order	125
44. Tickler card	126
45. Reply post-card order	127
46. Request for information	129
47. Flexible card	130
48. Reverse side of flexible card	130
49. Receiving department file copy	132
50. Form used for reporting receipt of material	133
51. General contract	137
52. General contract	138
53. General contract	139
54. General contract	140
55. General contract	141
56. General contract	142
57. Form on contracts	143
58. Contract record	144
59. Form used for keeping record of deliveries	145
60. Invoice record	150
61. Discount expires	151
62. Invoice record	152
63. Checking invoice	153
64. Invoice checked	157
65. Recording shipments and invoices	156
66. Inspection report	154
67. Material received	159
68. Form used for certification	160

LIST OF CHARTS

xv

69. Receiving memorandum	160
70. Notice of freight charges paid	162
71. Debit memorandum	163
72. Register of invoices to accounting department	163
73. Material received	168
74. Material received	170
75. Receiving report	173
76. Report of material	174
77. Receiving department	175
78. Receiving department report	176
79. Inspecting copy	177
80. Received at stockroom	178
81. Requisition on storekeeper	180
82. Requisition on storekeeper	181
83. Requisition on storekeeper	182
84. Credit requisition	183
85. Credit requisition	184
86. List of material required	185
87. Production record card	186
88. Material budget	188
89. Perpetual inventory	190
90. Perpetual inventory	192
91. Stock room sheet	193
92. Stock room sheet	194
93. Store room bin ticket	195
94. Temporary ticket	197
95. Tickler ticket	198
96. Tickler ticket	199
97. Report of low stock	200
98. Purchasing agent	201
99. Requisition from factories	214
100. Department requisition	216
101. Purchase order	217
102. Reverse side of purchase order	218
103. Purchase order	219
104. Request for quotation	220
105. Follow-up orders	221
106. Purchase order record	223
107. Requisition form	226
108. Purchase order form	229
109. Purchase order	230
110. Price quotations	231

111. Prints and specifications	232
112. Inspection order	233
113. Shipment order	234
114. Order of follow-up clerk	235
115. Shipment of material	236
116. Order of shipment by steamship	236
117. Tracer request	237
118. Notice of unrendered invoices	238
119. Construction office invoice	239
120. Purchase order record	240
121. Invoice register	241
122. Purchase requisition	243
123. Price record	244
124. Purchase order form	245
125. Approval form	246
126. Index card for orders	247
127. Foreman's requisition	249
128. Foreman's credit requisition	250
129. Perpetual stores record	251
130. Storekeeper's notice	252
131. Card for record of patterns	253
132. Companion card	254

PURCHASING

CHAPTER I

PRINCIPLES OF PURCHASING—GENERAL CONSIDERATIONS

The Art of Buying

THE steady advance in the art of buying has been one of the determining factors in developing scientific salesmanship. It is no longer possible for a salesman to walk into a modern purchasing office, and carry away an order on the strength of a few persuasive arguments and statements regarding his goods.

Today the buyer sometimes knows more about the material than the salesman. He should certainly be better posted as to its suitability for his particular requirements. He has his inspection reports, laboratory analyses, and physical tests to guide him. He has records regarding past performances of material, quantities consumed, and probable future needs, also estimates as to the available supply in the market.

This information can be collected, tabulated, formulated, and reduced to exact knowledge — which is science. With this equipment the purchasing power is at its maximum, while the salesmanship required is at its minimum. Under these conditions the advantage is with the buyer, and the best results in the

matters of price, quality, terms, and delivery are obtainable.

To put this into practical effect, therefore, it is necessary to apply systematically the knowledge which the purchaser must possess. The information from which this knowledge is gleaned is acquired and stored by the purchasing department and will be dealt with in later chapters.

To emphasize the importance of this subject, reference should be made to Figure 1, where the consequences proceeding from a policy of indifference or carelessness are compared in parallel with the results which can be achieved by the efficient direction and operation of the function of buying.

A glance down the first column will demonstrate that severe losses must be incurred by the absence of a scientific system and the use of improper methods, while the economic benefits and larger profits to be derived from a reversal of this policy are set forth in the second column.

To secure these advantages it is essential that certain methods pertaining to and peculiar to the art of buying should be in force. These features are made a special object of study and an exposition of them is given. Coupled with these special features it is imperative that a proper system be adopted and put into practical effect and the activities connected with purchasing be governed with wisdom, intelligence, and sound judgment. These conditions prevailing, the highest standard of efficiency can be maintained and the complete benefits and advantages secured.

The illimitable ramifications of business are supported by their interdependence. It is an essential concomi-

<i>Promiscuous Buying</i>	<i>Regulated Buying</i>
<i>Poor Prices</i>	<i>Lowest Prices for Quality Purchased</i>
<i>Inferior Quality</i>	<i>Highest Quality for Prices Paid</i>
<i>Purchases made in Excess or short of Requirements</i>	<i>Exact Quantities needed are ordered</i>
<i>Articles substituted for those actually bought</i>	<i>Articles purchased are those actually Delivered</i>
<i>Investment in Materials and Supplies excessive</i>	<i>Minimum Investment in Materials and Supplies</i>
<i>Erratic Deliveries</i>	<i>Deliveries made in accordance with needs</i>
<i>Unchecked, incomplete or excessive Deliveries</i>	<i>Exact Quantities ordered are Delivered</i>
<i>Improperly Checked and delayed Invoices</i>	<i>Properly checked and Promptly approved Invoices</i>
<i>Loss of Cash Discounts</i>	<i>Cash Discounts secured by passing invoices promptly</i>
<i>Duplicate Payment of Invoices</i>	<i>Security against over payments</i>
<i>Inefficient Service, Losses and Extravagances</i>	<i>Adequate Service, Economical Operation</i>

FIGURE NO. 1.—A comparison of the consequences ensuing from inefficient buying and competent buying.

tant to the building up of this complicated structure that the specialist in any one of its interrelated functions should acquaint himself, to as large an extent as possible, with the workings and accomplishments of the others. Purchasing is intimately associated and identified with many branches and divisions of business. It is incumbent therefore on the man who specializes in it to maintain his general knowledge on lines of the broadest conception to enable him to practice his art to the greatest perfection.

The Philosophy of Buying

Too often the question of price is made the determining factor in making a purchase without due consideration being given to the other phases of the transaction. Price and quality must be considered together. One sometimes bears an inverse relation to the other. High cost was formerly considered an indication of high quality, but for one's special and particular needs, the highest quality may be the cheapest. Conversely, a material which graded higher than the specification might not be equally serviceable for the purpose and prove the most expensive. Its exact measure of utility and therefore its value, is now determined on a more scientific basis than formerly.

The action of materials, during the manufacturing process and in the finished product, has been made the object of accurate study, and the information and knowledge gained from this study have enabled the engineers to draw specifications, which, when issued by the purchasing agent to bidders, have brought offers of material that will give the most effective results and be most serviceable.

The prime essential therefore is to purchase at the lowest possible price, the material which answers most fully to these requirements. Definite methods of testing should be stated. Specifications not enforced are worse than useless. A substituted material which had characteristics of higher intrinsic value than specified might not be equivalent to the specified material from a utilitarian point of view.

These are approximate definitions, and must necessarily be so in reviewing the subject in its relation to the whole field of buying, but each individual purchase can be weighed and examined with these considerations in view. If requisitions are received, and orders are placed without reviewing them, it is an inadequate method of procedure and is merely doing a commission house business. An indefinite number of specific instances could be given illustrating the importance of obtaining the right material at the right price, but each individual case has to be decided on its own merits and surroundings.

Common-sense, however, must be used in determining just what is to be done in the case of each purchase. With supplies of all kinds down to the most infinitesimal thing, there is always some one thing which is the most economical as a purchase for one's particular needs, but the amount involved may be trivial, and not warrant the expenditure of more than a very limited amount of time. There have been exhaustive experiments made with lubricants, when the annual purchases did not amount to as much as the cost of the experiments in the same period. But, where the consumption is large, it is imperative that the cost of the lubricant, the cost of material

worn from journals and brasses, and the cost of power to overcome friction, should all be carefully computed to arrive at the actual value for the specific purpose.

A large number of instances could be cited, but the above illustration will suffice to show that if a curve was kept of the usefulness of an article to the purchaser a curve of the proper price to be paid would bear a parallel relation to it.

Where the purchases of one class of material are sufficiently large to warrant it, the orders should be distributed between two or more concerns, as a measure of safety. For obvious reasons it is not advisable to have all one's eggs in one basket. This should not be done, however, at a sacrifice of price or quality unless there are extremely urgent and imperative considerations warranting such a course of action.

If the material in question is one of the essentials in production work, and the supply is coming entirely from one source, a serious dislocation of operations might ensue from the failure of this one source of supply from any cause, even if only temporary. For this reason, it is advisable, wherever possible, to draw supplies from as widely separated localities as the conditions will permit. The risk is then minimized from such causes as strikes, lockouts, and breakdown of transportation facilities. Dependable sources of supply being necessary to successful buying, it is imperative that the reliability and standing of the seller be known or investigated and his ability to perform the obligations he is entering into determined.

This brings into the subject of right buying the question of buying in such a way and in such places and from such sources as can be definitely and posi-

tively relied upon to furnish the goods and materials required at the time they are required, and in the quantity required, both of which are important economic factors in the operation of any establishment, or in the carrying out of construction work.

Buying at inopportune times or in excess of requirements is liable to entail severe losses unless there are compensating advantages in the matter of price. An accumulation of goods or supplies beyond what is requisite to keep the business moving along its appointed way, means that the following losses are incurred; depreciation, insurance, value of space occupied, and loss of interest on investment.

Personality in Buying

Personal contact between buyer and seller is not the potent factor it once was. This is due to the prevalence of more scientific conditions in buying. A perfectly satisfactory purchase can be put through without the two principals in the negotiation ever seeing each other. Personality is just as powerful as ever in the consummation of the deal, but it works on different lines. Business men will probably never cease meeting each other to discuss and close transactions, but personal contact in business is like personal combat in war, it is a waning influence in arriving at a decision. The tendency is in this direction in buying. Salesmanship is on a more impersonal basis than formerly. The great mail-order houses are examples of this, so are the slot machines.

A good buyer soon gets to know whether the seller has scientific and exact costs. If he has, the buyer can always tell when he has reached his bottom figure. A

man uncertain of his costs is uncertain of the price he quotes. In the case of the man who has exact costs, the buyer in negotiating might think he could call a bluff on him, and offer him the order at a reduced price. It would not be successful; there was no bluff; it did not exist.

Probably every successful buyer recognizes the principles of good buying, and although he may not have formulated and arranged them in his mind, nevertheless, he has undoubtedly a standard by which he does his buying, and maxims which he instinctively lives up to.

Some Present Day Methods

There are thousands of manufacturers in this country today who are doing hand-to-mouth buying with no well-developed scheme for making their purchases. They have some local jobber or near-by manufacturer supply their needs as required, sometimes almost day to day, with such things as a gross of files, or some emery paper, or a few bars of steel. Their contention is that it is not worth bothering about; the local jobber carries the stock for them, and that is worth the little extra money they pay him. They will also say they want to patronize the local dealers.

It is possible for them to continue to place their orders locally, but let them do it intelligently. Let them keep an accurate account of everything they use during one year, and the following year ask for quotations from the biggest and best manufacturers in the country. They will find they can save enough money to enable them to carry their own stocks and have a handsome profit left. They will not have to

place their order for a year's supply to be delivered at once, the sellers will make shipments almost as required. However, most of their orders will probably still go to the local jobber, because the result of this policy will be to awaken the jobber to the fact that he has not been buying right, and he will be able to get better figures, which will enable him to retain the business. It all resolves itself down to this, that thousands of manufacturers are letting some one else do their buying instead of doing it themselves, and that some one else may be a good buyer, but the chances are he is not.

Purchasing an Interesting Economic Study

The interest in the subject of buying is not confined to the inherent satisfaction which any man experiences when he has brought a negotiation to a successful conclusion. It is heightened by the wide field there is and by the constant changes taking place in all classes of goods as they pass through one plant after another. The numerous processes through which various materials go before final consumption, cause these to be considered by one manufacturer as finished product, while to another they are raw material. This is due to the great complexity of our manufacturing industries.

The enterprises not strictly of a manufacturing character, such as public utilities, mining, etc., cover a very wide field, and their activities require the purchase of supplies and material, equally as varied and complex as the manufacturing industries. For this reason a study of the subject offers great diversity

and is of particular interest and attractiveness. Men have specialized in various phases of the work, just as engineers and doctors have in their professions. The fundamental underlying principles, however, governing the conduct of the work and the methods employed for its accomplishment remain the same, whatever the nature and scope of the undertaking.

Economy of time and materials will never go out of fashion, and the saving which can be effected in the purchasing of materials, supplies, merchandise, and equipment, is an economic problem, the investigation of which will amply repay any person interested in it.

CHAPTER II

FUNCTIONAL POSITION OF PURCHASING CONSIDERED

Importance of Good Buying to the Success of an Undertaking

NO great commercial enterprise has been built up, or is continued in active operation, without the expenditure of large sums of money. Comparatively, this is equally true of every business large or small. This expenditure is in a measure a foundation, in a sense it may be said to be the corner stone, for without this the erection and superstructure of the enterprise cannot progress. The purchasing department of a business is the instrument through which a large proportion of the expenditure is made, and the success of the business will be affected by the amount of correct thought given to this department, and the judiciousness with which the purchases are made.

The success or failure of a business may be the direct result of good or bad buying. This is easily conceivable if one studies the consequences which either one or the other involves, as set forth in parallel in Figure 1. The importance of the function of buying can be readily understood from it, and any establishment indifferent to it would need to make enormous profits, have little competition, and unlimited capital to survive any length of time.

There is too great a tendency in some concerns to belittle the purchasing and treat it in a negligent and

offhand manner, but this is a very narrow view. It is, however, held by the heads of many of the medium sized and smaller industries who have perverted ideas as to the relative importance of the various sections of their business.

They will not spare expense in an endeavor to increase the results obtainable from the sales department, or to develop the effectiveness of the production division. There they can see tangible results, whereas their vision does not penetrate far enough in the other direction to appreciate the benefits to be derived from the scientific control of purchases. Without such control the advantages are intangible, but they can be brought out forcibly and succinctly by a complete and concise system, and the proper regulation of the buying and all that pertains to it. Results can then be set forth as clearly as in the sales or production department.

Many thousands of manufacturers hold views of buying which are detrimental to their interests, but fortunately opposite views are held by our national "captains of industry" and by all men who give business organization close attention. Studious reflection and investigation by others cannot fail to bring to them a realization of the importance and relative standing of this vital function of their business.

While stress has been laid on the importance of the function of buying, it must not be forgotten that it is a component part of the activities of the concern as a whole. Any purchasing agent having a distorted or exaggerated idea of the importance of the functions of his department, will not be able to do the most efficacious work in his sphere of usefulness, and will

unconsciously hamper the efforts of the heads of other departments, resulting in an unbalanced administration.

The Relation of Buying to Cost and Selling

The great importance of good buying is emphasized by the fact that a large percentage of the profits of any concern is absolutely and undoubtedly due to the ability of the purchasing agent to buy the best

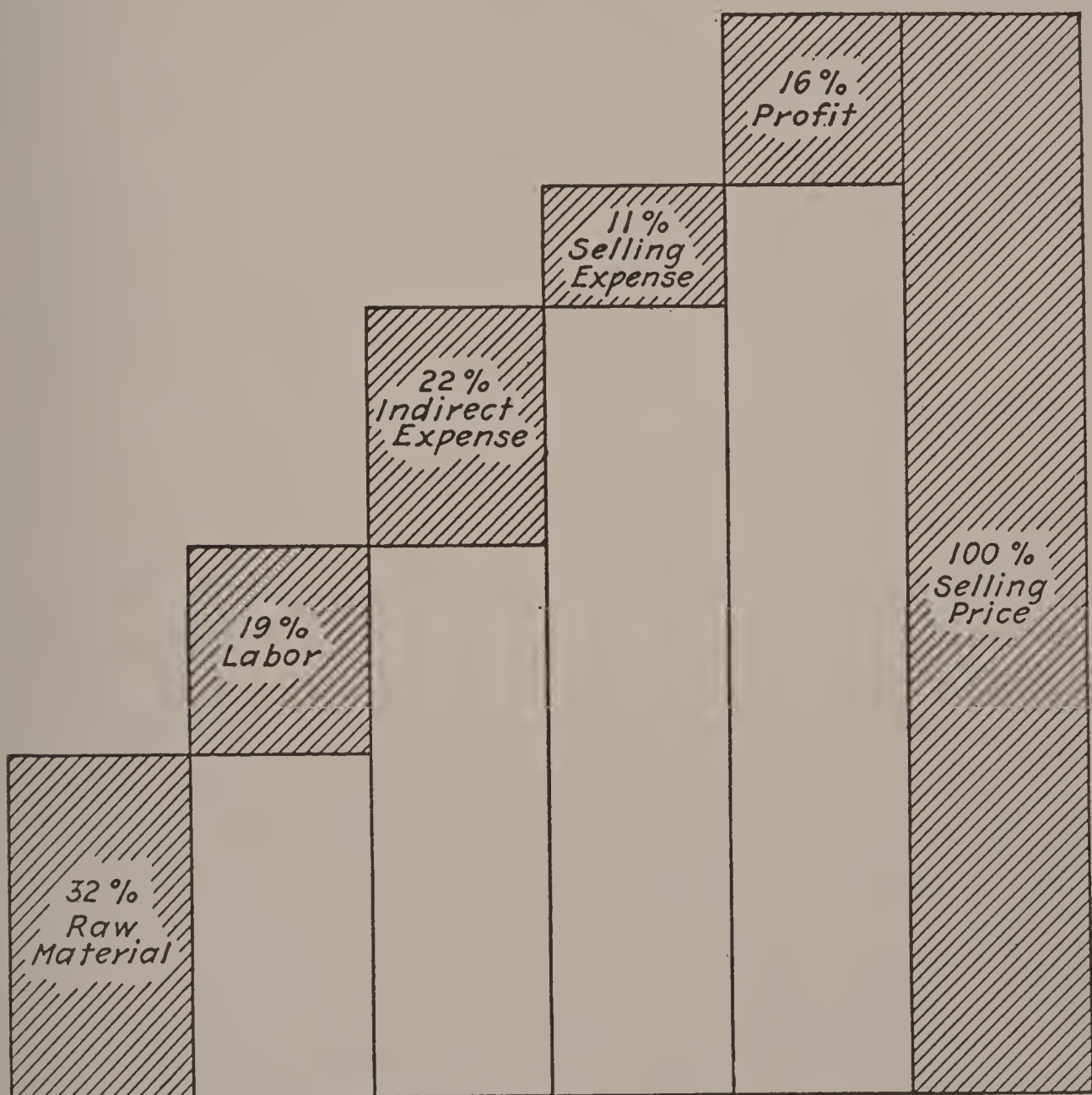


FIGURE NO. 2.—This diagram illustrates the building up process of the cost of an article until the selling price is reached. Perhaps no two articles would show identical rises for each step but all would show a succession of unequal advances from zero to 100%.

from a utilitarian point of view for the lowest price. This is the first step in the profits.

Figure 2 indicates the five main stages by which a product reaches its selling price. Subdivisions of each stage could be given, but as an illustration for the present purpose the above is sufficient. It is made up from actual conditions existing in a manufacturing establishment, and serves to show the importance of starting right by buying right.

The acquisition of raw material is the initial step incurred in the cost of making anything and the relation of its percentage to the final selling price will depend on the nature of the output of the factory. If valuable metals are used for raw material the first step would be an exceptionally high one, but the reverse would be the case if cheap crude raw material was used and a highly finished product turned out. The production of almost any finished article means that the material in it has been bought and sold many times because manufacturing industries are interrelated to such an extent. This causes great variation in the cost of the raw material one starts with, but emphasizes the importance of closely watching the price and scrutinizing the quality.

It must not be forgotten that the activities of the purchasing agent do not end with the first step shown in Figure 2. Indirect expense includes considerable quantities of material used in maintenance and repair work. There are supplies of all kinds, such as oils, brooms, packing material, and office supplies. The selling expense includes stationery, catalogues, etc., therefore, buying is a factor in each of the stages shown.

Reference has already been made to the importance of so directing, arranging, and controlling all purchases, that without an undue accumulation of materials there should be at all times sufficient stock on hand to enable the production department to maintain its activities in unbroken continuity. This has a direct influence on the cost of a manufactured article, for the losses incurred through overstocking increase the indirect expense, as do likewise the losses sustained from an insufficient supply of materials and the consequent decrease in the output of the factory

Influence of Buying on Profits

Regulated and right buying is a study in economics. If one looks over the field of endeavor connected with production and manufacturing, and observes its tendencies during the past few decades, it will be noticed that intensive economical operation is applied more closely as time goes on, until a condition exists with many concerns, where they save their profits instead of making them, or rather they make their profits by savings. It does not appear that there will be any lessening of this tendency. This country, rich in natural resources, with a nation of born salesmen and advertisers, has, heretofore, solved the problem of getting more profit by making more sales. Conservation of natural resources and competition have forced a realization that an increase of advertising and selling expense will not continue to increase the business, in proper proportion to this increase of expense. Hence the necessity for reducing costs. Right buying strikes at the very root of the problem as its economic value has a vital bearing on the cost of production.

The profit on any manufactured article is not determined by the price as much as it is by the cost. The selling price is fixed by the demands of the public and competition. The first effort usually made to widen the difference between cost and price is to increase the output by encouraging the demand through advertising and more scientific salesmanship. When the limit is reached in this direction, recourse is had to investigating reduction of costs. In cost reduction, the principal attack is made on the labor item. In the days of primitive manufacturing, labor and material were the only two items considered in computing costs, but today labor costs frequently hold third place, indirect expense and material being the two which rank ahead of it. Efficient methods of reducing these should go hand in hand with the efforts directed at labor costs. To reduce the cost of materials, an effective system of buying is compulsory, if the best results are to be obtained.

Literature of Buying

If the catalogues of any of the well-known publishers of technical and scientific books are consulted, one can find plenty of books devoted to the problem of reducing labor costs, but comparatively little literature can be found on the subject of scientific methods of buying. It is an economic study which is deserving of more attention than it receives. In some of the books published on business management, due recognition is given to the subject, while in others it is treated in a cursory manner.

The paucity of literature on the philosophy of buying is further accentuated by taking a concrete case,

which will illustrate the relative importance of this subject to other allied economic studies.

It has already been pointed out that, in any finished manufactured article, the value of the raw material may have been insignificant compared with the labor costs. The opposite may be the case, especially where valuable metals are manipulated. The labor costs are then much lower than the cost of the raw material which enters into the product. Take for instance an article, the actual cost of which is sixteen dollars, that is, without any percentage added for indirect expense. Assuming that these sixteen dollars comprise nine dollars for material and seven dollars for labor, why should there not be an equal amount of educational literature directed to effecting a saving on the nine as on the seven dollars?

It is apparent that this is not done, yet it will invariably be found that the application of scientific methods in purchasing is equally beneficial in affecting a reduction in raw material costs as similar methods are in labor costs. No two industries will show the same proportion of labor and material entering into a finished product, but the foregoing is a fair assumption, and it seems incredible that one item is selected for criticism and discussion, and is made the subject of profound study with many volumes devoted to it, while the other is treated as a negligible quantity.

Constructive thinking in its application to the production department has been elaborated on in many volumes, and in the technical journals and periodicals. The literature on the art of salesmanship is voluminous and highly scientific. The problems connected with accounting methods have been analyzed and dis-

cussed exhaustively. The intricacies of finance have been sifted and examined, and placed before students of the subject in an interesting and attractive form. This is in contradistinction to the literature devoted to the philosophy and art of buying, which is neither extensive nor exhaustive, although it is a subject of equal importance and is an attractive and alluring study.

CHAPTER III

ETHICS OF BUYING

Ethical Standards in Purchasing

ALL undertakings and enterprises which work in the field of manufacturing, transportation, or merchandising, whatever their scope, character, or nature, are divided into departments for administration purposes, and the greatest success which can be achieved in the conduct of the whole, is by the practice of the Golden Rule. It naturally follows, that to make this policy potently operative, each department must work in unity and conformation with it. In no section of the business is it more essential to keep this strictly in view than in the purchasing.

The maintenance of a high standard of conduct in purchasing raw material will have its influence on the conversion of them by the production department into the finished product, and on their final disposal by the sales department. The influence of this policy will permeate all transactions which may take place subsequent to the actual purchase of materials and supplies, or of goods for resale.

The old saying, "Goods well bought are half sold" has been interpreted in many ways, the construction placed on the word "well" being the bone of contention. It has frequently been asserted that "well bought" means cheaply bought, the inference being that, if bought cheap enough, a ready market can be

found at a profit. Also it has been construed to mean that it was a good buy, because a market existed where the goods could be quickly disposed of. Again it has been defined as obtaining material which was needed for manufacturing purposes, and of which a limited supply existed, the buyer congratulating himself on securing the articles in competition with another purchaser.

The expression "well bought" means all of these things and something more. The best has not been done, the maximum efficiency has not been reached, unless the purchase has been made with the knowledge, that there is a channel for its disposition, that the price paid is the lowest obtainable for the quality bought, and that *some good purpose has been served both buyer and seller* by the consummation of the transaction. To those who think this idealistic, it is none the less true, and particularly is it true where the 'other fellow's extremity is your opportunity.

A policy such as advocated does not preclude the use of every maneuver which has for its object the consummation of the purchase of goods and materials at the lowest possible price, or rather of the right goods at the right price. Until this object is attained every move which good diplomacy may suggest should be brought into play. The accomplishment of the desired end along such lines will redound to the credit of both buyer and seller, to the department, to the concern as a whole, and to the universal standard of business dealings.

Buyer and Seller

When the man with whom a negotiation is being carried on knows he is going to receive a square deal, his inclinations will tend towards giving one. There are skeptics on this point who will quote instances where contrary results apparently ensued from the adoption of this policy, nevertheless, if it is consistently followed, it will win in the long run. If what is generally known as "sharp practices" are resorted to by one party to a negotiation, it is not necessary for the other party to use similar tactics to combat them.

One frequently hears the expression, "There is no sentiment in business." Too often the meaning implied is that no unselfish motives exist. But this is not so. Evidence is abundant to the contrary. Many true friendships have been formed between buyers and sellers, but ulterior motives have been ascribed to them. Business acts are always accompanied by feelings and motives of some sort, and these are not wholly selfish.

It must be remembered that there are ethics of selling as well as of buying. Business houses of established repute will jealously and assiduously protect their reputations, and in dealing with them, mutual suspicion and distrust can have no place. The buyer with the highest standards of honor and conduct governing his motives and actions is going to be met in like manner, for the fundamental principles of both parties to the transaction will be identical.

Honesty is interpreted in Webster's dictionary to mean "A nice sense of allegiance to the standards of one's profession, calling, or position," and this is about

as good a definition as can be given of the purchasing agent's attitude, to his coworkers in the establishment, and to all men he meets in his multifarious duties and transactions.

Misrepresentation and Its Results

If by some trick or misrepresentation a seller has been inveigled into accepting an order by which he stands to lose money, he will invariably begin to figure how he can evade the terms of the contract either in quality or quantity, in such a manner as to deceive the buyer, to enable him to break even.

A loosely worded inquiry has been known to give a false impression as to quantity of goods required, and when sent out broadcast, has brought so many salesmen, some from long distances, to the buyer's office that the combined value of their time and expenses exceeded the value of the order.

This expense must eventually be charged to the cost of goods and paid for by the buyer. It is a problem which can be met by more scientific methods. There should be no intent to deceive, nor should the inquiry be sent for spectacular effect to firms who are not prepared to bid.

Contracts and Price Fluctuations

Every arrangement or agreement made between buyer and seller is a contract, and is in force until completed in accordance with its terms and conditions or until mutually abrogated. Price fluctuations have been the cause of many failures to live up to agreements, as have also other conditions, which have

arisen and intervened to the advantage of one party and the disadvantage of the other.

Unfortunately we cannot do business in the same manner as it is still practised by the Chinese in some parts of their country, where obligations to buy and sell are entered into verbally and the fulfilment strictly and rigidly adhered to even if the life of the agreement extends over a period of years, and factors have arisen in the meantime which are detrimental to one of the parties.

Competitive Bidding

The principle of competitive bidding must be kept alive; if it is abused it will react on the buyer and destroy this useful and necessary function to the general scheme of buying. Competition is the life of trade. If manufacturers and others quoting by solicitation are not treated fairly and impartially, they will soon become acquainted with the fact. Eventually this will prove detrimental to the buyer and render it impossible for him to maintain the highest standard of efficiency.

Quotations made by the seller to the buyer are for him alone and should be regarded as confidential. To disclose these prices to a competitor may seem to serve a temporary advantage, but eventually such a practice will hurt the purchaser and his concern.

Advantage of Prompt Payments

A purchase is always made with an agreed date for payment, and a scrupulous regard should be had for this and the obligation liquidated as specified. A

seller is entitled to his money exactly in accordance with the agreement, if he has fulfilled his part of the bargain. A concern whose purchases were very large, and who habitually held back payments even for a limited time beyond the agreed date, would be taking an unfair advantage and possibly putting the seller to considerable inconvenience. Some slight advantage might be gained by the financial department of the buying concern, but this would be more than lost in the purchasing department. It is a known quantity of power on the side of the purchasing agent, when the seller positively knows that the agreed date for payment will be strictly adhered to.

The Offer System

There are innumerable expedients familiar to every experienced buyer, the knowledge of which can only be gained by contact with the actual work. It would be impossible to enumerate them all, only some broad governing principles are given. Some are to be avoided. As an illustration there is the "offer" system. This is when a quotation has been given and it is the lowest that can be obtained and the order is offered at a still lower price. If habitually practised, all prices quoted will eventually be on a basis that can be scaled.

Purchasing and selling have built up the complex structure we call business, with its interminable ramifications. A finished article ready for consumption or use is the result of successive buying and selling just in proportion to the numbers of its component parts. This process goes back, widening and spreading until it reaches the original raw material. Is it too much to

ask that through all these transactions a standard of honesty should be maintained which will be recognized and accepted by everybody concerned?

Every purchase concluded on right lines strengthens the position of the establishment it is for, and is helping towards the attainment of perfection in business intercourse, the upbuilding of national industries, and international trade and commerce.

CHAPTER IV

THE PURCHASING AGENT

Factors and Conditions Connected with his Work

THE development in the art and importance of buying has brought into prominence the men in charge of this work, and they now hold a recognized position of distinction and consequence in all commercial undertakings.

It has been stated that there is no such thing as scientific buying, but that good buying is the result of intuitively knowing when and how to do it, which, with a combination of luck, makes a successful buyer. It can be admitted that with this equipment a successful gambler may be evolved, but intuition is too vague a qualification for the purchasing agent of any establishment, large or small. There is a great deal more necessary in the make-up of any man who has charge of such work as is being considered here. He should have good judgment, be well balanced, shrewd, sagacious, and well fortified with the knowledge which he can scientifically accumulate; this, broadened and improved by a close study of local and national conditions, will make a purchasing agent a valuable asset to any concern.

The unique position occupied by the purchasing agent brings him into close touch with all departments of a business. For this reason he is often more intimately acquainted with its life, growth, and devel-

opment, and has a better knowledge of its needs and requirements, than probably any other department head in the concern. From this it can be deduced that the purchasing agent has opportunities enjoyed by few other men in the organization for attaining the highest executive positions. In some large corporations the purchasing agent is created a vice-president and director in recognition of his abilities and owing to the importance attached to the operations of his department.

One man is not always wholly responsible for the purchases made by any large establishment, but on one man the responsibility does rest to a much larger degree than on any other, and that man is the purchasing agent. The engineer or the expert specifies the material required in many cases, while in others the man who actually fabricates the article may have to be consulted in the selection of the most suitable grade. In the purchase of tools and implements, the nature of the work, the conditions under which they are to be used, the material they are to operate on, and a knowledge of the men who are to use them, must be a predominant consideration in making a purchase, and consultation would be necessary with the man who is to have charge of their operation. In buying goods for resale, other considerations must necessarily be thoughtfully and thoroughly weighed. It is axiomatic, therefore, that the man in charge of these purchases must be tactful and diplomatic in his dealings with the other men interested, and in addition he must, to obtain the best bargains, possess good business training and be a keen student of market values.

The general principles which should govern the actions of the purchasing agent are the same, whatever the nature and size of business. To obtain the best results, he must be a man who is able to meet other men without arousing their animosity, for to be on a good footing with the men with whom deals are being made is a great advantage. Men will do for friendship what they will not do for financial gain. One of the surest ways of arriving at a good understanding with the salesmen is to be able to talk with them about their own goods, and a man who can do this intelligently will be able to make better deals.

While the methods in vogue, the organization, and the routine work of the purchasing agent's office, are of great importance to its successful operation, it is essentially through the character and make-up of the man in charge that the best results are obtained.

In appraising the services of a purchasing agent, the assertion has frequently been made that he buys as low as is possible, the assumption being that this qualifies him as a most capable man for the position. Outside of the purchasing agent's office, and in other departments of the business, the matter of price is too frequently looked upon as the great or only desideratum. While admitting that this is a consideration which must never be lost sight of and is of supreme importance, nevertheless it is imperative that in conjunction with the question of price other questions must be brought into the calculations when a deal is being made. The quality and suitability of the goods for the particular purpose for which they are needed must be considered. The reliability and standing of the seller must be known or investigated,

and his ability to perform the obligations he is entering into, besides many other factors which will be referred to in a later chapter, and which need the calm appraisal of a well-balanced mind.

Shrewdness is essential to the purchasing agent, and tactfulness will help him over many rough places and assist in the consummation of many advantageous transactions. Tact has been described as doing the right thing at the right time, and is probably more essential in this department of the business than in any other.

Technical knowledge is a great advantage, but cannot be relied on to develop a successful buyer. The vast amount of technical knowledge acquired by architects, engineers, physicians, and lawyers, carries them to certain fixed points or niches in their professions; but the men who have achieved the greatest successes, or rather who have acquired the greatest financial gain, are those who have had the commercial instinct working in their make-up in combination with their scientific knowledge.

Technical knowledge without common-sense would be of little benefit. In fact, common-sense is perhaps the highest requisite for a purchasing agent to possess, and this qualification combined with energy, directness, honesty, and hard work will prove irresistible.

Matters on which the Purchasing Agent should be Posted

To formulate anything like a complete statement of what a purchasing agent should know, would be something like compiling an encyclopedia. Some of the points on which he should be informed have been

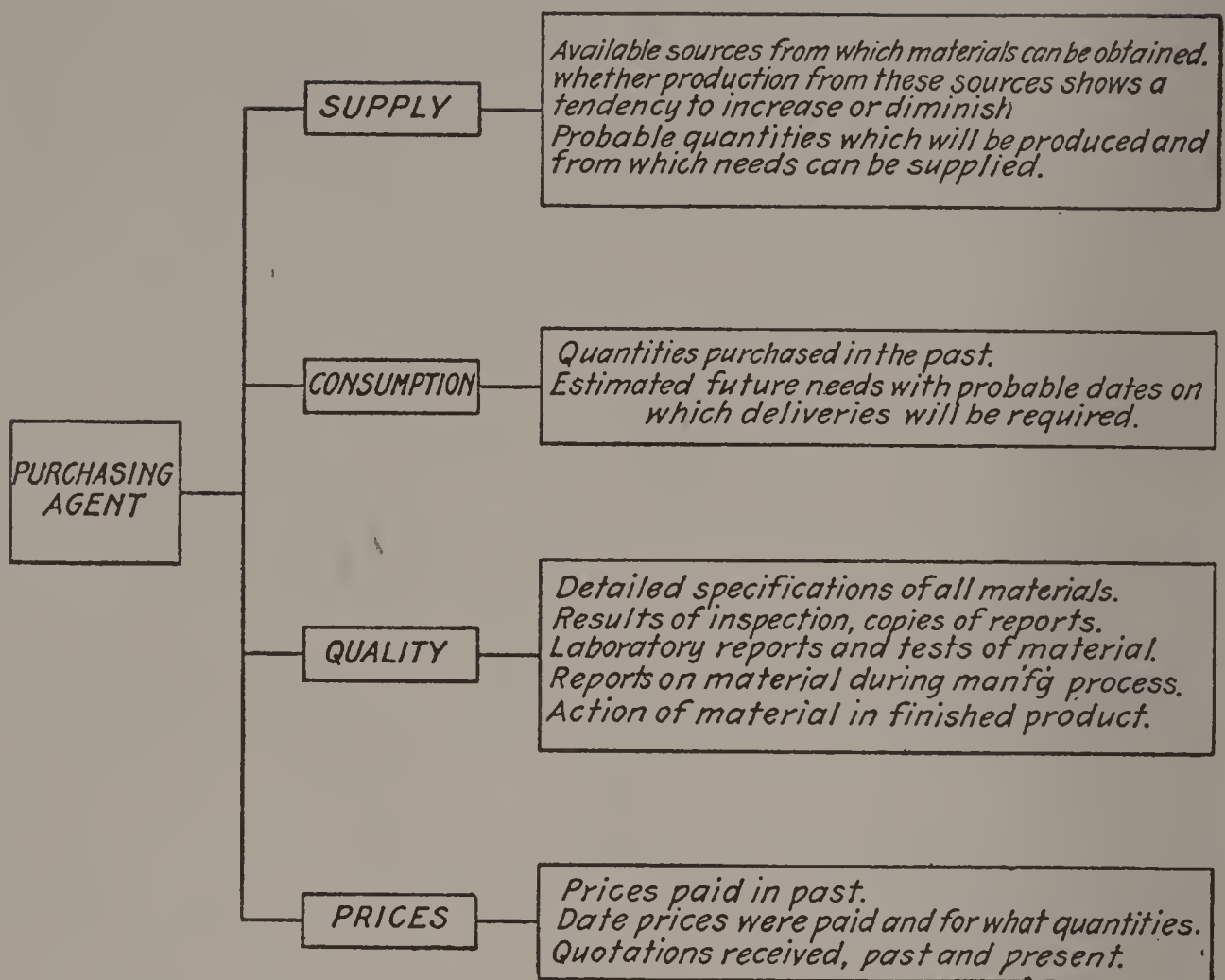


FIGURE No. 3.—A diagrammatic synopsis of the various matters on which the purchasing agent should have information when he is making a purchase.

already alluded to, but in actually making a purchase there are certain fundamental facts upon which he should be well posted, and which are categorically set forth and tabulated in Figure 3. His organization and system will keep this information and these data in a state of efficient preparedness and ready for reference at all times. But it must be remembered that there is no finality to this work. Somebody has said that "Acquired knowledge is only elementary compared with the vast fund of information which is yet undiscovered." This applies with force to the information necessary in a purchasing agent's office.

Purchases can be divided roughly into four great classes:

1. Purchases for productive work.
2. Purchases for resale.
3. Purchases of supplies, tools, and implements.
4. Purchases for capital account.

In all of these the purchasing agent is an important determining factor. In the first three he should be the final arbiter and have the deciding voice. He should conduct and conclude all negotiations affecting price, terms, and delivery.

In the matter of capital outlays, the purchasing agent should always be consulted. If he is a man who has a broad conception of his job, his judgment should be valuable in arriving at a decision as to the advisability, the manner, and the most opportune time to make an investment, whether it is in additional real estate, a new building, or better facilities for carrying on the business of the undertaking, should it be a trunk-line railroad, manufactory, or mercantile business. In this connection a knowledge of prevailing financial conditions will be of service, the causes which have brought those conditions about, and the probable future tendency. This opens up a very wide area for research work by the purchasing agent, and an unlimited scope for the acquirement of knowledge useful in his field of endeavor.

If information is on file as indicated in Figure 3, it means that the purchasing agent is posted and ready to go into the market to buy at any time fully prepared. He knows exactly

1. Where he can obtain what he needs,
2. The quantities he needs,

3. The quality he must have, and
4. The price he should pay.

These are the four main considerations to enable him to make a satisfactory purchase. Further explanation a little more in detail follows.

1. Statistics are compiled of all those commodities which affect the prosperity of the country and are deemed of national importance, such as wheat, cotton, copper, etc., and information as to the visible and invisible supply is kept on file by those houses trading in them. Most purchasing agents are interested in some particular material or commodity, about which he should have information as to the probable quantities on the market and what will be available in future. It may not be possible to obtain exact data, still much information that is valuable can be accumulated and put on record. This will be essential to him in negotiating for additional purchases, for a surplus or shortage in the supply will affect the price.

2. All facts connected with consumption in the past should be on record, as on this will be based some calculations as to future requirements. Additional information can be obtained from other departments of the business as to the estimated quantities that will be needed and probable dates on which deliveries will have to be made. There will also be the maximum and minimum limits for guidance. These data can be ready for reference at any time a question should arise as to the advisability of making a purchase. Whenever a requisition is received the exact quantities and delivery dates will be definitely known.

3. In some plants there is an engineer of materials, who inspects standardized material and also approves

substitutes which may be offered. He may also have control of testing machinery and laboratory. This may be independent of production or purchasing departments. Individual conditions will determine the advisability of this, but full information should be on file in the purchasing agent's office. In other cases one of the many firms of reputable inspecting engineers may be employed to inspect and furnish this information. Through these sources the purchasing agent can be accurately and fully informed regarding the physical and chemical properties of almost anything he buys largely. Such things as coal, steel, cement, varnish, paint, etc., are constantly tested by large buyers.

4. The three considerations mentioned will influence the price to be paid. The fourth is the prices on record, and in conjunction with the first three, it will form a sure basis and guide. Quotations received should be recorded and kept up to date. If it is necessary a price curve should be kept, as this is much more illuminative than a tabulated list of figures. It is still more instructive if a price curve and quantity curve can both be kept. A later chapter will give more details with forms for keeping and recording these data so as to make them available at any time.

If a diagram is made showing the steps by which the selling price of an article is arrived at, it would show a progressive but unequal series of rises from zero to 100 per cent. This is shown in Figure 2 in the last chapter.

Each step represents a percentage of the selling price, and a purchasing agent should know enough

of the cost accounting of the factory to enable him to trace the part the purchases play in fixing the selling price. It is better to have an intelligent idea of this than to be working in the dark. All persons in the organization do better work if they are interested in the final result, and this creates an ambition to make the best showing in their share of its activities.

Another problem which is constantly before the purchasing agent is the question of dealing intelligently with the many substitutes which are offered constantly in place of materials in use. He should, therefore, be sufficiently well posted about the business to know whether those offered are worthy of being tried out. No buyer can afford to ignore the many things which are offered at apparently attractive prices, and a knowledge of the products manufactured is necessary to enable him to discriminate.

The Principal Functions Covered by the Purchasing Agent's Activities

It has been intimated in the earlier portion of this chapter what the purchasing agent has to do in general, but in the actual carrying out of his executive duties it is necessary to be specific. Figure 4 illustrates the main divisions of the work which he must supervise.

In large establishments the stores and traffic may be entirely separate departments, but even so the purchasing agent has an interest in their work. The economic value of a good purchase might be lost, if no adequate means existed for receiving and storing the goods, or if an excessive freight rate was paid, or if delayed in transportation.

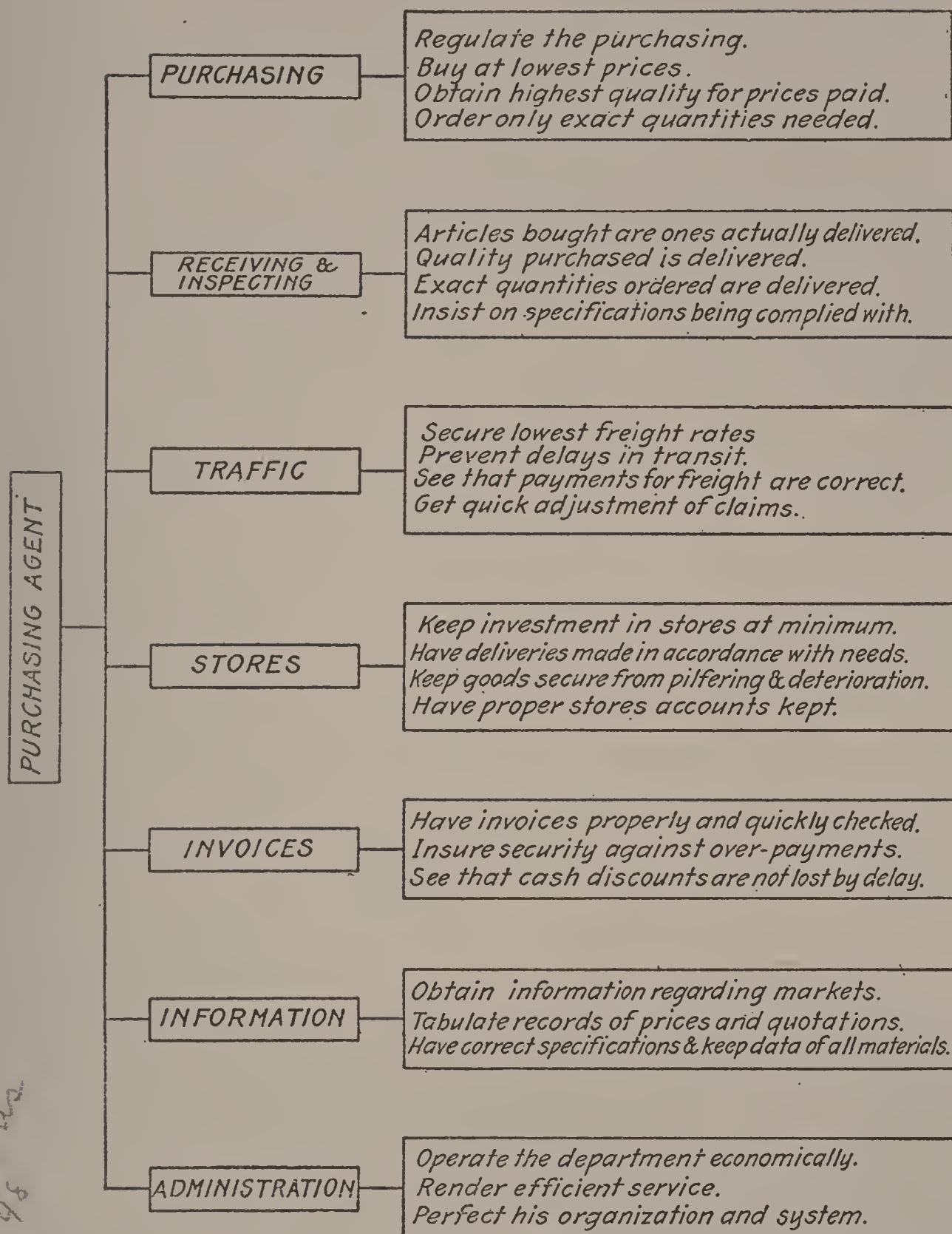


FIGURE NO. 4.—A diagram showing in tabular form the main divisions of a purchasing agent's work and the principal details of each division.

In very small plants one man may have to cover all of this work, but they are still distinct divisions of his activities. In large undertakings the purchasing

agent will have the necessary assistance to carry through the work expeditiously and efficiently. By the aid of his assistants he must accomplish the various functions of his department, and to do this in the right way he must have such men as have suitable characteristics for the division of the work he allocates to them. He must organize them into a comprehensive whole, and arrange a system that is as simple as possible for the proper execution of the work. If the purchases are for a manufacturing establishment, one thing should be remembered, and that is that rush orders have no place in a well-regulated factory and stores system. Such orders dislocate the work of the purchasing office and are not conducive to good buying.

The purchasing agent should at convenient intervals visit his principal sources of supply. This will be found exceedingly valuable as an adjunct to the information he has acquired through his regular channels, and give him a point of view which he could not obtain in any other way.

The tabulated list in Figure 4 will not be discussed in detail here. This whole book covers the duties of the purchasing agent, but that tabulation puts them into succinct form for reference at a glance.

Definition of the Purchasing Agent's Authority

A clear definition should exist as to the authority of the purchasing agent to commit his company to extensive obligations. The writer has before him the copy of the regulations of a large corporation, and in reference to the purchasing agent the wording is as follows:

“The purchasing agent is charged with the purchase of all materials and supplies. A requisition signed by the head of a department shall be sufficient authority for the supply of materials which *in the opinion of the purchasing agent* are necessary for the execution in the ordinary course of the duties with which they are charged.”

It will be seen from this that the onus of responsibility is thrown on the purchasing agent. He therefore has to be a man of strong character, and to be able to decide what is necessary. Cases have been known where the “heads of departments,” who are sometimes only foremen, have been in the habit of requisitioning entirely unnecessary and useless material, involving the concern in severe losses. It is therefore essential that limitations should be placed on the men who draw the requisitions and there should be regulations governing the authority of the purchasing agent in the exercise of his duties.

In certain circumstances and under certain conditions it is possible that no restrictions or limitations need be placed on the purchasing agent, other than those which the size of the business and its well-known requirements and necessities would practically automatically enforce. But in such cases he must have a knowledge of the financial resources of the concern.

In the case of a large corporation whose finances are a special study, and which is a borrower more or less all the time, limitations must be in force. These limitations should be governed by the nature of the purchases and the purpose for which they are intended. An amount can be stipulated for general monthly purchases, and while they remain below

that figure the purchasing agent should have a free hand.

If there are exceptionally large purchases to be made, and the material to be bought is required for carrying out a contract into which the corporation has entered, then it should be a matter for consultation between or reference to some other officials. The treasurer, sales manager, or production manager may have to be consulted or possibly all three.

When large expenditures are contemplated for machinery and equipment, it may be necessary to get an authorization from the directors. A policy of this nature brings together the heads of departments interested and the relation of the actual requirements of the corporation to its financial resources are brought into harmony. When the decision has been made to go ahead with the purchases, the purchasing agent should be left in sole charge of the negotiations.

The treasurer of a company can only pay out the funds on receipt of a properly accredited voucher, and it does not seem good business policy to place the purchasing agent in a position where he can obligate his company to an unlimited amount on the receipt of a requisition from an irresponsible foreman or department head. Some scheme to regulate this should be outlined in every business, modified to conform to its nature and scope.

Relation of the Purchasing Agent to Other Department Heads

Mention was made of the advisability of the purchasing agent visiting his sources of supply, which enables him to post himself on many things which he

cannot get through the ordinary channels, and likewise gives him an opportunity to study at first hand the manufacturing and business methods of the people he is dealing with.

Similarly, it will be of great benefit for him to see at frequent intervals, the heads of departments from whom he receives requisitions and confer with them on their needs and on any matters which arise in connection with the purchases he is putting through for them. A much better understanding is arrived at in this way than through messages and correspondence, a mutuality of feeling is created, and a reciprocal tendency established to help each other, which will be found of great advantage. This is particularly the case in overcoming shop prejudices, and in those situations where long use has caused another department to grow accustomed to a certain kind of material, when there are others in the market equally as serviceable and by the use of which savings can be effected.

The diagrams given in this chapter (Figures 3 and 4) are intended to illustrate in a condensed form the two salient features of a purchasing agent's activities. First he must know certain things and secondly he must do certain things. But on both of these points he can render himself and his department more valuable to the establishment by acquiring from the heads of other departments a more intimate acquaintance with their requirements and collaborating with them in their legitimate aims. This is something beyond what appears on the face of the ordinary mundane requisition and cannot be tabulated or put into diagrammatic form. This is comparable to the

purchasing agent getting better acquainted with the concerns to whom he gives orders. He is then on the best footing with the people for whom he is buying and from whom he is buying.

It is the custom in some establishments for all communications between departments to be written, but this can be carried to an extreme where it is wasteful of time, effort, and stationery. For certain matters it is necessary, but beyond what common-sense dictates as essential, it should be discouraged. The good judgment of the purchasing agent should determine how far this should be carried.

CHAPTER V

THE PURCHASING DEPARTMENT

IN reviewing or discussing the function and activities of a business or one of its departments, the subject can be divided under four headings:

1. The consideration of the work as a whole, the various phases of it, and in what manner it can be divided to obtain the most efficient results.

2. The organization of the personnel of the department to take care of the work of each division.

3. The system or method of procedure to be followed by the employees in doing the work allocated to them.

4. The actual operation, with the necessary forms for carrying out the work.

In this chapter, the first of these will be dealt with, each of the others being the subject of separate chapters.

The Department's Sphere of Usefulness

The purchasing of materials and supplies was originally segregated because the activities of the undertaking demanded the undivided attention of one or more persons for this purpose. The organization of establishments into departmental formation naturally demanded that the functions of buying should be recognized. Thus was created the purchasing department, and it now has a fixed and permanent position

in commercial life. It has enabled the other departments to devote their whole time to their special work, and has proved its own existence to be necessary by the economies it has been able to effect, and by the usefulness of its work, and the great benefits derived from the systematizing of purchases. Its growth in efficiency will more fully demonstrate this.

There is no manufacturing process so simple that it does not require a great variety of material and supplies to maintain its active existence. This is true also of most of our public utility companies and engineering enterprises; and in order that the best interests of the undertaking may be served, the purchase of everything needed by each department should be centralized, and never delegated to several persons scattered through the various sections of the establishment. Even where a concern has a number of factories, or work going on in widely scattered parts of the country, there should be central control. In such cases it may be advisable to do part of the buying locally, but there should be a guiding and controlling hand, to which the local buying bears the relation of fingers.

The designation of "everything" is used in exactly the sense the word implies, and covers raw material, machine tools, equipment, and office supplies. This policy of centralizing the buying is put into effect through the purchasing department, and it should be the court of last resort. If manufacturers and suppliers are allowed to solicit business from the heads of other departments, coming to the purchasing department for a confirming order, it reduces its usefulness and standing. Salesmen should not be allowed to go

over the head of the purchasing agent. He is then a known quantity of power and any other policy would weaken his position in negotiating a deal.

The demands on the purchasing department grow naturally from the needs of the business, and cannot therefore originate with the department itself. For this reason it is essential that the work be efficiently and expeditiously carried through, for on this depends the measure of usefulness it is to the other departments and to the whole undertaking. There are many ways in which this can be demonstrated, and standardization will be given as an illustration.

Standardization of materials is generally recognized as imperative, and strenuous efforts are made throughout all production departments to put this policy into effect; but quite often in large undertakings supplies and equipment are of such a variety as to bewilder one accustomed to uniformity. Such things as stationery and office furniture seem peculiarly susceptible to the vagaries and personal predilections of the heads of departments. There will be, for instance, three makes of filing cabinets used when one would answer for all departments. Many cases could be cited in all kinds of supplies. It is particularly noticeable in some of our municipalities. The standardization could be effected through the purchasing department more readily than any other source, as it is the clearing house for all requisitions. Economical considerations and the question of convenience should compel attention to this. Certainly better prices can be obtained if standard articles are bought which can be used in any department, and the convenience derived from their being interchangeable cannot be overlooked.

Size of the Department

This department of a business may be large or small. It should be proportioned in size and importance to the actual requirements and necessities of the undertaking. In a large corporation devoted to transportation, public utilities, or manufacturing, this will mean a purchasing agent with a staff of assistants necessary to such an organization.

In a strictly merchandise business, there will be buyers for the numerous departments who act individually under certain restrictions and sometimes under central control.

Some of the large railroad combinations which operate lines in various sections of the country have a system of co-ordinating their purchases through a purchasing agent who has his office in close proximity to the president and directors, and possibly not anywhere near the railroad for which he is buying.

Manufacturing concerns with factories in widely separated parts of the country have found it to their advantage to have a central control for purchases. This is sometimes done through a supervisor of purchases, under him being a purchasing agent for each factory. Good results have been obtained through such a scheme in the matter of price, uniformity of raw material, and better regulation and control of purchases, consequently making things easier and smoother for the financial department.

The size of the department can be graduated to meet the needs of every establishment until in small concerns there may be only part of the services of one man required; nevertheless, it is strictly a de-

partment of the business, and the fundamental principles governing its work remain the same irrespective of its magnitude

The Employees of the Department

The staff necessary will of course be governed by the volume and importance of the work passing through the office. There must be sufficient number of employees to carry through promptly and efficiently the daily routine operations. A department has failed because through outside pressure it has been forced to reduce its staff to a point where the work could not be carried through in its normal course, or it has been compelled to employ inferior help with a corresponding reduction in efficiency. This is not economy, it is parsimony. If the work of the department is worth doing at all, it must be well done or it has no reason for existing.

A department may fail in its mission from other causes. It may become overloaded, top-heavy, and encumbered with too many employees, or an unworkable system of operation. Either of these conditions will mean a reduction in efficiency, and if its continuance as a useful factor in the business is desired, reorganization will be necessary.

Greatly increased efficiency can be obtained by effective team work, and among the members of the department there should be engendered a spirit of good feeling and co-operation, which should be encouraged to spread to all the points where contact is made with other divisions of the enterprise. This is of inestimable benefit in overcoming friction.

Relations with Other Departments

A staff which is entirely unsympathetic with the particular needs of the users of the material will fail to grasp what is one of the most essential things necessary for this department. They will be dealing with papers and accounts instead of with men and things.

It is up to the head of each department to bring about and keep in existence this harmonious relation, and tact, discretion, and diplomacy should be exercised by all the staff, for this department is constantly in contact with others. Every purchasing agent has had the experience of being told what is thought of his department when any delay has occurred in obtaining material. It is assumed at once that the purchasing department is entirely out of sympathy with the legitimate aims of other departments.

Every department of a business is a member of one family and although each member must stand on its own feet and work out its own salvation, it should nevertheless be willing and ready to assist and make as smooth as possible the workings of every other department. This can be done without much overlapping, which should be avoided wherever possible. The duties of each can be clearly defined and the work allocated so that no friction will exist, and happy is the concern which can carry on its multitudinous activities in such a manner, for it is no exaggeration to say that vast sums are lost where these conditions do not prevail. There should be a meeting point between any two departments where no clashing, friction, or jealousy exist, but where the necessary

intercourse and junction between the two flows as smoothly as the traditional village stream.

It is a question mainly of being able to meet and handle the peculiarities and prejudices of the human element. Any concern comprising many departments may have to meet this in an acute form, but with the right methods it can be met with the least amount of inconvenience and hindrance to the work of any department with an appreciable resultant gain.

The attitude of the other departments of the undertaking will be a reflection of the purchasing department's service to them, and the criterion by which it will be measured. Mutual confidence and co-operation will be attained by a policy of tact and willingness to help. The lines of demarcation between departments are not boundary lines between two countries, where many formalities have to be gone through before one can cross.

Subdividing the Department

Figure 5 illustrates in a distinctive manner the method of dividing the work of a purchasing department. There are really three main divisions of the work connected with purchasing, these being:

1. INFORMATION, which includes:

- a.* Obtaining information as to sources of supply.
- b.* Recording data of past purchases.
- c.* Recording prices and quotations.
- d.* Keeping results of inspections and tests.
- e.* Maximum and minimum quantities and future needs.

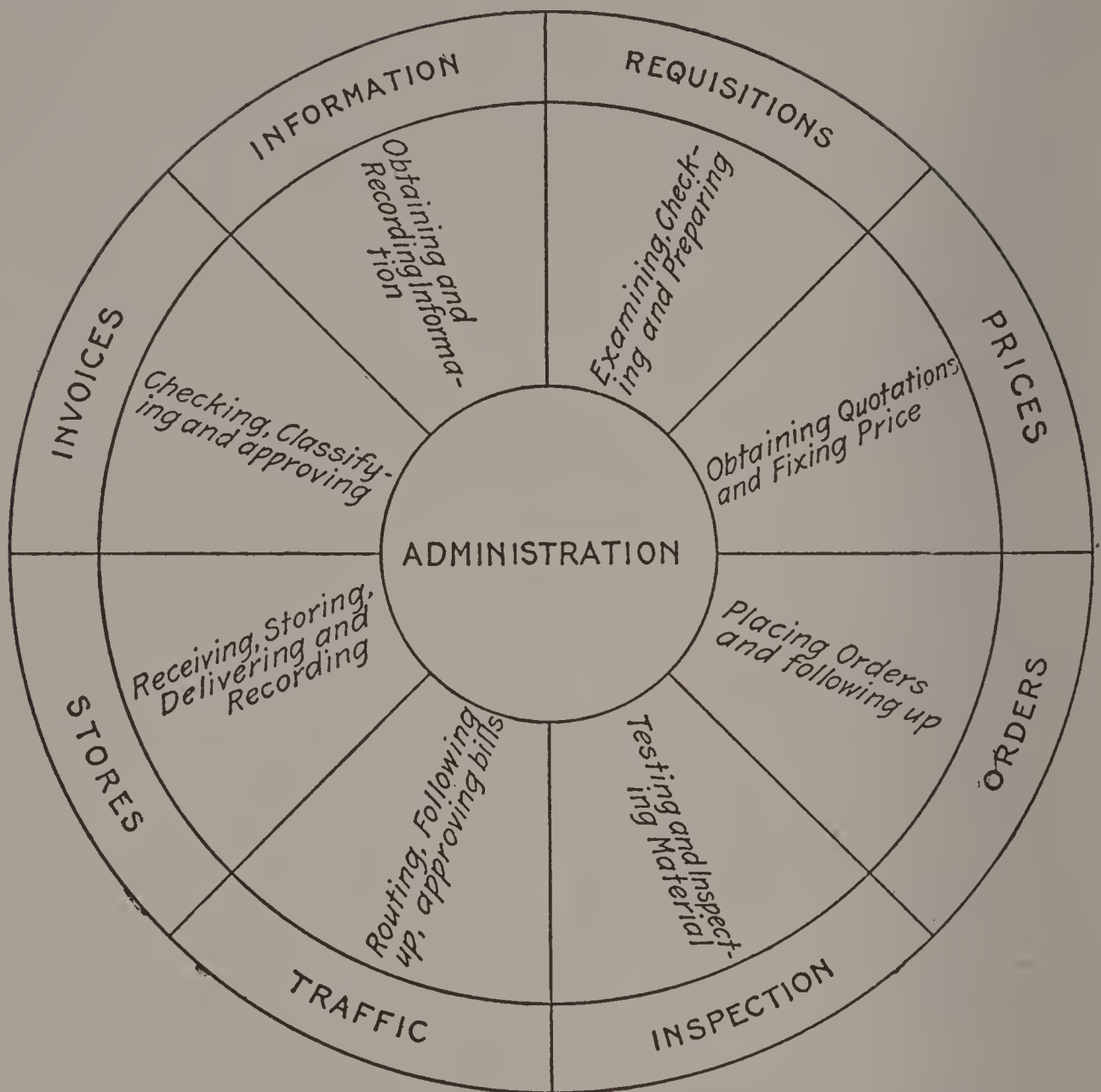


FIGURE No. 5.—Chart of the functional organization of a purchasing department.

2. PURCHASES, which is subdivided into:
 - a. Work connected with requisition.
 - b. Obtaining quotations.
 - c. Placing orders and following up.
3. INVOICES, which is subdivided into:
 - a. Recording and checking with order.
 - b. Checking prices, classifying, etc.
 - c. Approving and passing to accountants.

There is other work which is in some cases included in purchasing department, and in others is entirely separate. This work is connected with:

4. TRAFFIC, which is subdivided into:
 - a. Seeing that shipments are properly classified;
 - b. That correct freight rates are obtained;
 - c. That no delays occur in transit.
 - d. Getting quick adjustment of claims.
5. INSPECTION, which includes:
 - a. Inspection of material before or on arrival.
 - b. Making physical and chemical tests.
 - c. Reports on material in shop and in the finished products.
6. STORES, which is subdivided into:
 - a. Receiving material and supplies.
 - b. Storing in secure and proper places.
 - c. Delivering for consumption as needed.
 - d. Keeping proper and reliable accounts.

The first three sections, which are connected with purchasing, are dealt with fully throughout the book; but the other divisions, which are not essentially a part of the function of buying, call for some remarks on the principal features of their activities.

Traffic Division

In industrial economics the study of problems connected with transportation and stores keeping are extremely interesting. The efficient operation and conduct of the work coming under these designations is vital to the well-being of any concern. They are closely related to the work of the purchasing department, but owing to the magnitude of the undertaking,

or some other good reason, the work connected with traffic and store keeping does not come under the purchasing agent's control, but these are organized as separate departments. This is a matter for solution as found best in each individual case. If the regulations governing the purchasing department require it to buy and furnish materials and supplies, then it is certainly part of its duties not only to buy, but to deliver the goods to the department needing them. This means arranging and controlling transportation, receiving, properly storing, and finally delivering them to departments for consumption when they are ready for them.

The main objects which are achieved by the proper and efficient control of the traffic problem are:

Goods are received promptly and correctly.

Shipments are made properly.

Teaming is arranged on most economic basis.

Freight charges are lowest obtainable.

Claims are quickly adjusted.

It is not the province of this book to go deeply into this interesting subject. The brief description given will convey some impression of its economical importance in all transactions involving the movement of merchandise, material, and equipment.

Inspecting, Receiving, and Storing

The proper inspection, receipt, and storing of materials and supplies are of great importance. The principal advantages secured by the efficient control of these functions are:

1. The receipt of goods as ordered, both in respect to quantity, quality, weight, and size.

2. The rejection of excess quantities or those incorrect in weight or size, or inferior in quality.

3. The absolute knowledge that, when invoice is checked with material receipt, you are getting exactly what you are paying for.

4. The proper care for material until such times as it is needed for consumption, with the minimum amount of deterioration.

5. The maintenance of a complete and perpetual inventory during the period that goods are at rest in the stores.

6. The delivery for use or consumption exactly as and when required, with a complete record of same. Cost accounting would be practically impossible without this.

The perpetual inventory serves to show when stocks are reaching, and have reached, the maximum and minimum permissible. The fixing of this limit in both directions is of the highest importance. It enables sufficient material to be carried in stock for the needs of the business, and is a preventive against overstocking. There is a monetary value in being able to furnish promptly to the production department such material as they need at the precise moment it is required. Active stocks can be maintained at the minimum consistent with safety. Investment is kept at the lowest possible point. The space occupied is reduced to the smallest dimensions. All these are gains, whereas if stocks carried are excessive for needs of business, or if track is not kept of the activity of certain stocks and they accumulate beyond requirements, or if "dead" stock is carried, the following losses are incurred: depreciation, insur-

ance, obsolescence of money invested, value of space occupied.

The perpetual stock record is theoretically a correct basis for periodical inventories, but the human factor must be taken into account, and some discrepancies are always shown when actual count is made. The nature of the stock has something to do with this. It is remarkable, however, how closely these check up in well-kept stores. In theory it should balance as accurately as the cashbook. When checking the perpetual inventory with stock in stores it is not necessary to make a count of all items at one time, but it can be done in sections while routine work is going on until the whole is covered with frequency and regularity.

CHAPTER VI

ORGANIZATION OF DEPARTMENT

Organization of Personnel

THE purpose of this chapter is to endeavor to outline the organization of the staff of the department. It is not possible to present to the reader an office completely organized to fit any condition, all the employees at their respective desks with the necessary equipment as a potent working force.

Some purchasing departments have been in existence so long that their evolution and growth are shrouded in obscurity. The origin, however, in all cases has been the same: the necessity for a systematic method of making and controlling purchases. From this need the idea sprang and was followed by the apportioning of part or the whole of one man's time or the allocation of several men to the work.

This was the nucleus from which all purchasing departments started, and a similar scheme must be followed by any concern desiring to bring its policies into recognized lines of highest efficiency.

The purchasing department is an economic development itself, and therefore its internal management should exemplify this policy. This does not mean that cheap men should be selected for the work, as such a policy would be like buying the lowest priced article which might prove the most expensive from a utilitarian point of view.

The main object to be achieved is to get the work done ably, correctly, and expeditiously at the least cost. Cheap men and mistakes are more expensive than high-priced men and efficiency.

The organization should be complete, but at the same time should consist of the smallest possible number of employees. Work can always be carried out more effectively when there is sufficient to keep each person diligently engaged rather than when there is a superfluity of employees without proper duties to assign to each.

In any active business the purchasing department fulfills one of the most vital functions of the concern, and its activities cannot be stopped or delayed. In considering, therefore, the number of employees necessary for the department, this must be borne in mind and provision made for the work to continue during the temporary absence of any employee.

To provide for this contingency means that each person in the department must have an understudy, or the work allotted to him must be of such a nature that it can be portioned out among the others for short periods. There should be no indispensable man in the organization.

This policy has a beneficial effect in making the force more adaptable, and has a tendency to make a man take more interest and do his work more intelligently, because it gives him a broader view of the work as a whole. He sees more clearly where his particular duties fit in, and he may be enabled to see improvements which can be effected.

This also brings more intelligent co-operation between the employees which has a direct influence in

securing more completely the objects to be attained, and is of inestimable benefit to the conduct of the work. It is also conducive to more enthusiasm, and enthusiasm breeds loyalty and contentment, which beget efficiency.

One cannot take the plan of the organization of any going concern and implant it in another establishment as a solution of the latter's problem, and as embracing all the elements necessary for the performance of its work. Circumstances and conditions vary to such a degree that this is not possible even where the nature and volume of the business are practically identical.

It is therefore intended that the organization as outlined here should be looked upon more for helpful suggestions. It is one of the constructive duties of the purchasing agent to plan the details of his department and anything he finds useful in this supposititious organization will have to be adapted to his own surroundings.

Theorizing does not accomplish anything, but it is generally the product of experience, and put into practice produces experience.

In studying employees, the men selected for the various phases of the work should be chosen with a view to their natural aptitude for the work to which they are assigned.

Linking up the Employees

Where the organization is large enough to warrant its being subdivided for the better performance of its duties, great care must be taken to form these subdivisions in such a manner that intercommunica-

tion is easy and made without perceptible retardation of the work.

Another matter to be considered is the linking up of the individual work of each member of the organization to form a composite whole. An endeavor has been made in Figure 6 to demonstrate this. It is only intended here to briefly outline the duties of the members of this tentative organization for the better understanding of the chart. Their complete activities will be described when each function is dealt with in detail.

Information Clerk

A large proportion of the work of the department can be done only by frequent reference to the information and data on file. It will be necessary for the person in charge of this to keep his records up to date. He must have all requisite facilities for obtaining and retaining the data as to prices, sources of supply, past purchases, catalogues, inspection reports, etc. He must, therefore, be methodical and systematic, and be ready to furnish the information promptly and correctly or have it in such shape that it can be easily referred to.

Requisition Clerk

Requisitions frequently come into the office with incomplete information on them, and it is the duty of the man handling them to see that they are in proper order and that the material is correctly specified. He will have to refer to the information files constantly and must be in close touch with the man having charge of these.

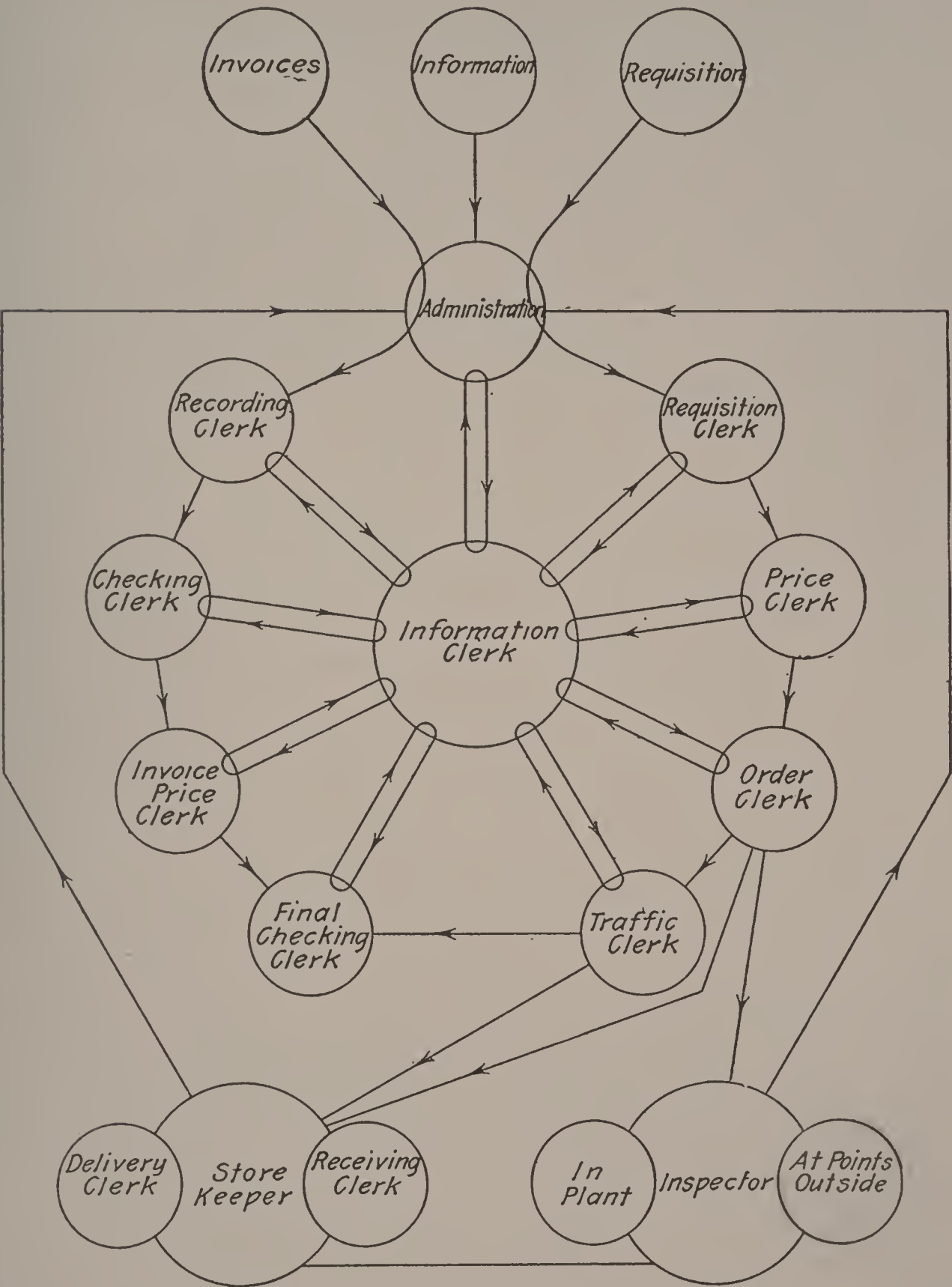


FIGURE No. 6.—Organization of the personnel of a purchasing department.

Price Clerk

The price clerk will specify the price from agreements or contracts which are already in force, or obtain

quotations, make comparisons of the prices, and submit them to purchasing agent.

Order Clerk

The duties of the man in charge of orders will be to see that they are properly written up from specifications and with correct prices, check them before the purchasing agent signs them, and follow up after they are placed. Copies will have to be sent to parties interested.

Inspector

The inspector will receive copy of order and inspect material either in the plant or at point of shipment, reporting to purchasing agent and possibly to storekeeper. He may also have to furnish reports on the action of materials during the process of fabrication.

Invoice Clerks

There will be as many men as necessary on this work, recording invoices, checking with order, checking prices, classifying, having traffic man approve freight charges, and finally passing invoices to accountants. Part of this work is sometimes done in accountant's office.

Traffic Clerk

There are many industries whose activities are not of sufficient magnitude to warrant the maintenance of a separate traffic department. Again, some concerns whose operations are very large can, from the nature of their work, combine this work with the purchasing organization. This is the case where the

orders placed are mainly for construction work and traffic matters all pertain to these purchases, there being no shipments from factory for sales department. A man should be selected for this work who is conversant with its character and the problems involved in it.

Storekeeper

A reference to Figure 6 will show in what manner the storekeeper is linked up with the various activities of purchasing. He is more directly interested in the actual movement of the material itself and its conservation. The purchasing agent has indirect connection with the storekeeper through the order clerk, but the storekeeper on his part must have direct access to the purchasing agent, and an effort has been made in the diagram to show how this is accomplished.

When the activities of the purchasing department are restricted to buying, the stores organization would be formed independently, but it is sometimes found advisable to combine the keeping of the stores with the purchasing, especially in the smaller manufacturing concerns. A short summary of the organization to take care of this work is given here. As in the traffic division, the volume of the work to be accomplished will determine the number of employees requisite. This will vary greatly with different concerns, but arrangements must be made to cover the following points irrespective of the number of employees organized to do it:

- Receipt of all material and supplies.

- Checking to see that they correspond with orders.

- Counting, weighing, and measuring.

- Placing in proper storage compartments without

undue delay, or in some cases delivering directly to department for consumption.

Entering on receiving records.

Making entry on stores record or perpetual inventory.

Delivering from stores to various departments all material and supplies required by them.

Making entry on perpetual inventory.

Keeping stores tickler in force and advising purchasing agent.

Keeping record for cost accounting.

Receiving scrap into stores, counting, weighing, and measuring, and advising purchasing agent.

These are the principal points to be covered and a good man should be placed in charge with the necessary clerical help for keeping up the records. In handling the material, arrangements must be made to give all the help required. The men engaged in the physical operation will be under orders of the storekeeper. In small factories it is not always possible for these men to be a fixed number and temporary assistance can be drawn from other departments to assist with heavy material.

When the cashier receives a dollar he is held accountable for it, and has to keep a proper record of its disposition. A dollar's worth of brass tubing is just as much an asset as a dollar in cash. The honesty, integrity, and reliability of the storekeeper must be on a par with the cashier. In fact, the storekeeper must be more watchful and careful in guarding against petty thefts. The assets under his control cannot be placed under lock and key and sometimes many persons are handling them in receiving into and delivering from the stores.

A further reference to Figure 6 will illustrate that the organization of the personnel is dependent upon three main sources for the arrangement given of their work. These sources are shown at the head of the chart. The functions of each member of the department originate from one of these and the performance of the work of each follows a well defined course. There are however many minor activities which are common to almost any business office but which are too well known to need detailing here.

CHAPTER VII

SYSTEM OF PROCEDURE

General Outline

WHATEVER the size or scope of the department, it is absolutely essential that there should be a proper system on the lines of which the work can be carried along, but system does not perform an operating movement. It is simply the well-kept track on which the energy and efficiency of the organization put through the work to be accomplished until the terminus is reached. This track must be kept as straight and level as the nature of the route to be traversed will permit, with the least possible number of curves and grades, and where these cannot be dispensed with, they should be gradual and easy.

In pamphlets and books on various systems for office, store, and factory management, statements are frequently made regarding what a good system will do. As a matter of fact, a system of itself will do nothing. It may be inert and useless unless operated. A good system can be compared to a trunk-line railroad with useful and profitable branches. Care must be taken that no unprofitable extensions and branches are added, or they will be a burden and expense and retard and clog the work of the main line with the prospect of rendering the whole a failure.

Forms and office implements do not make a system, they are the vehicles or implements necessary for

operation and will be described in subsequent chapters. They should be as few as possible, for then the work will be expedited. Too many forms are cumbersome and retard the work.

The aim should be to plan or outline a route for the work of the office, which shall have a definite object in view and be coherent, logical, and thorough. It should expend the least amount of the energy of the organization. Simplicity should be kept in view, and all forms used should be devoid of any features likely to lead to complications. Have the system cover everything essential to gather into concise form the necessary data, and in such a way that they are readily understood and easily accessible. When this object is attained stop, but do not stop until it is attained.

If a condition of over-systematizing is allowed to come into existence, it is a menace and will lead to confusion. An abnormal desire by the head of a department to secure and maintain records covering a mass of detail not pertinent or essential to the department, will eventually crush it by its own weight; while an incomplete system will render the work and operation of the department laborious and inefficient. A good system will help towards order, regularity, and expedition.

The justification of a system is its effectiveness in covering with accuracy and dispatch all the points comprehended in the work of the office with the absolute certainty of increased economy.

It is necessary to design and lay out one's own system. Although valuable suggestions are obtained by studying others, they can rarely be adopted with-

out alterations and changes to meet the conditions of one's own case. A good system is really dictated by common-sense. It has to be administered by the organized staff in the office with all the human frailties, and the better co-ordination it can bring to their efforts, the greater its potentialities for success.

There are thousands of men today at the head of large establishments who look on system as so much red tape, and the observance of any logical routine in handling their business is repugnant to them. Certainly they have their methods of doing work, but they are imbued with the idea that there is some inherent complexity in a correct system. The writer knew of a manufacturer, whose annual business amounted to several hundred thousand dollars, with the following routine for making purchases: A foreman would need some material and would make a memorandum of it on any piece of paper which came first to his hand. This "scrap of paper" was sent to the office where the bookkeeper would write an order. Price was never questioned, quantities in stock were unknown, and invoices checked from memory. If material was urgently needed, the bookkeeper would telephone for it, not sending a confirming order. If he happened to be out of the office, the foreman himself telephoned.

Some men do business with methods such as these and make money, but it is only when their profits are abnormally large, and when brought into the strong light of competition with businesses which have an efficient purchasing system and accurate methods of cost keeping, they would be pushed to one side and probably not know the reason why.

A system is a means by which the purchasing agent can put the work through the office by the shortest route, giving the most efficient service at least cost.

System of Procedure for the Collection of Data and Information

The collection of information pertinent to the activities of the department is an absolute necessity if it is to be kept thoroughly posted. And, unless the members of the department want to trust to their memories, it is equally imperative that all of this information should be assorted, converted, reduced, or arranged so that it can be placed in convenient and handy receptacles ready for instant reference by the purchasing agent or his assistants. This is the stored knowledge of the department and is a potential factor in its operation.

Figure 7 shows the route to be followed in reaching out and acquiring the various items of information, printed matter, etc., which are necessary to make the files valuable for reference. A full description of this work will be found in the chapter on Operation of the Department. On receipt of the information in the office, or in posting it from quotations and orders, an orderly and logical arrangement should be followed by simple processes, so that there may be concentrated in clear and concise form a complete expression of the data required.

Except the data and information posted directly from office records, all the other matter relating to this phase of the work can pass through a regular clearing-house system and be sorted and placed in its

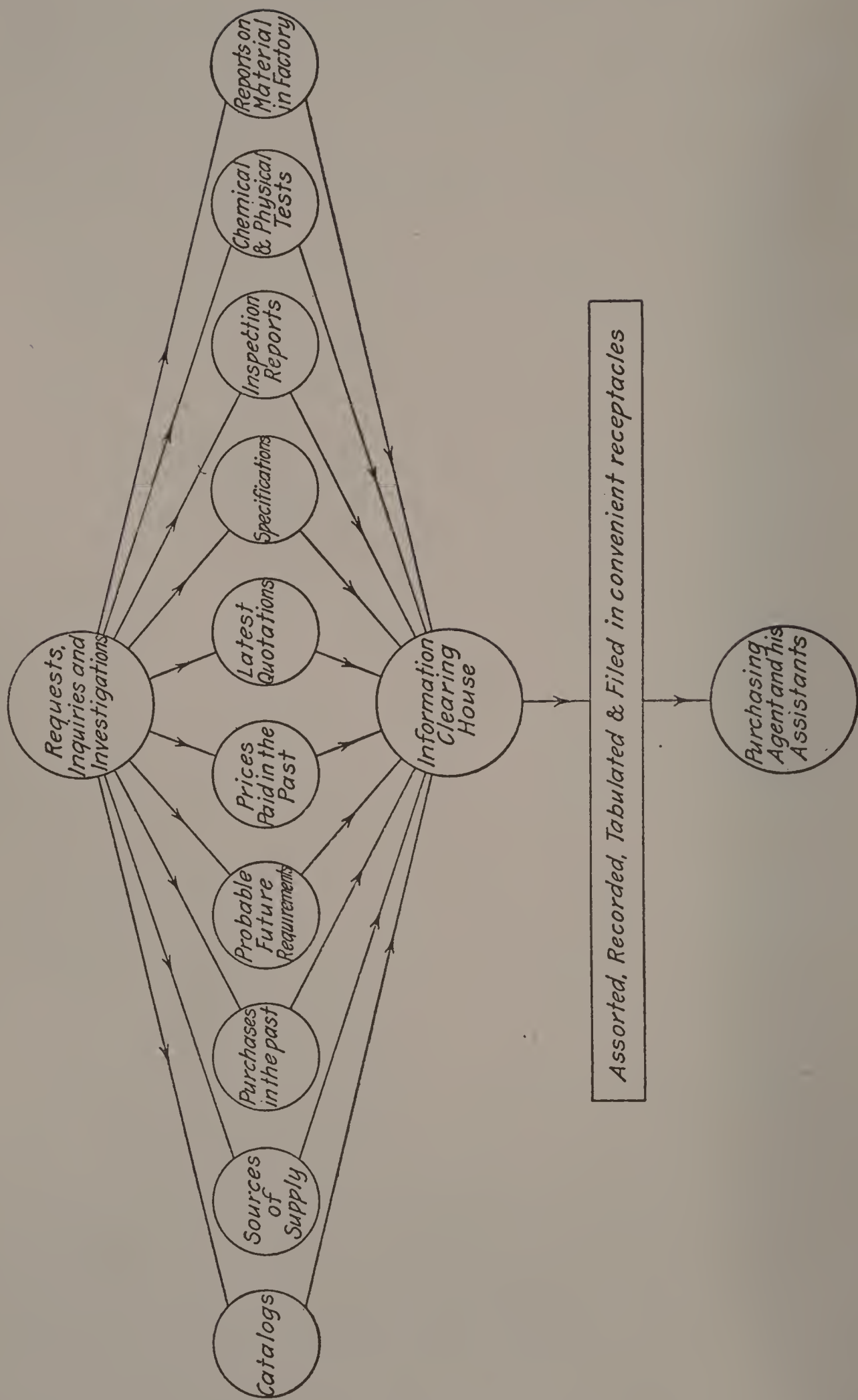


FIGURE No. 7.—Chart of system to be followed in obtaining and recording information requisite in a purchasing office.

proper receptacles ready for reference at any moment by the office staff or purchasing agent.

Purchasing Procedure

The system followed in making purchases is very clearly illustrated in Figure 8. The requisitions coming into the office constitute the authority to make the purchases. They should be seen first by the head of

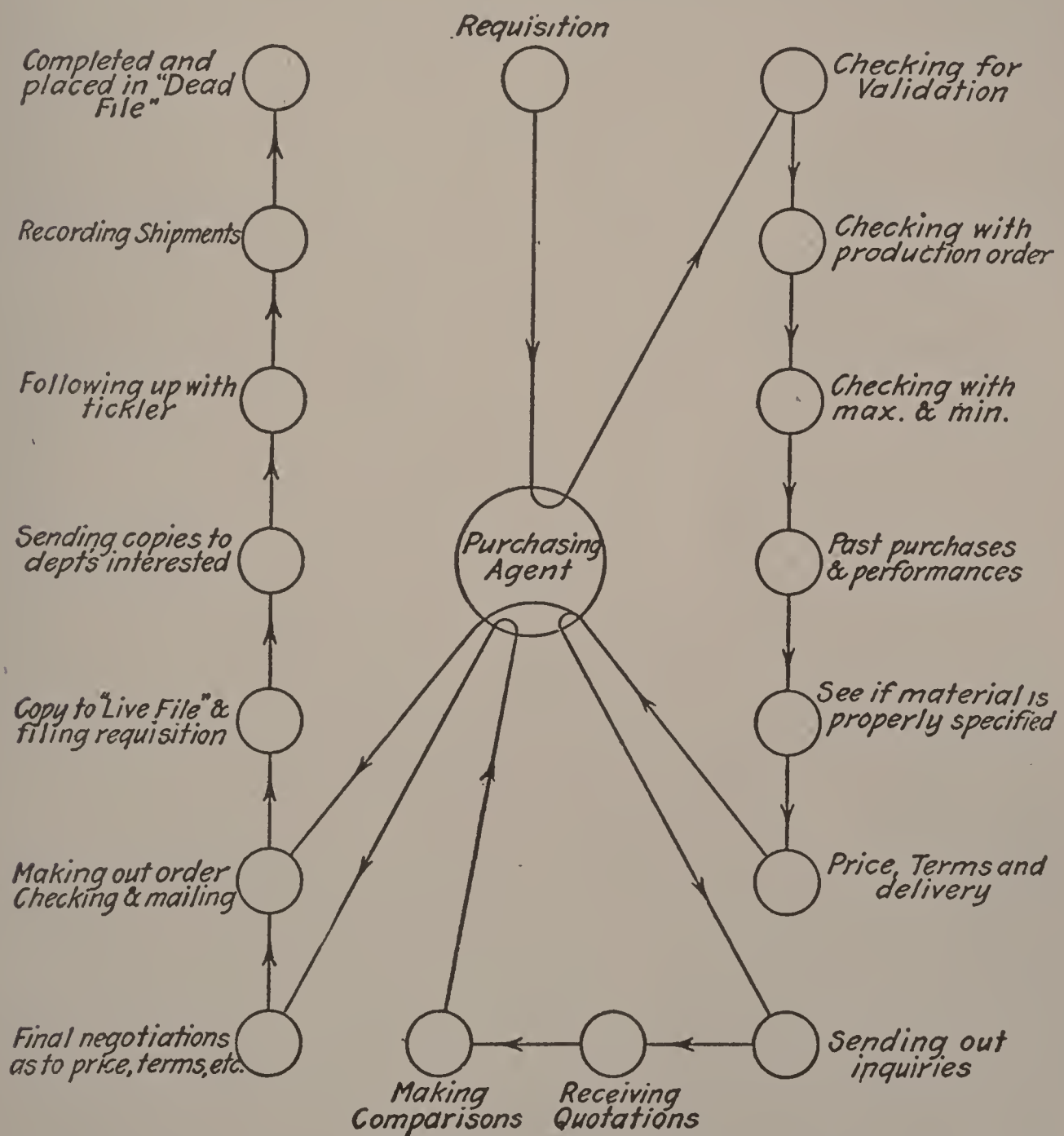


FIGURE No. 8.—Chart of procedure from time requisition is received until order is completed.

the department if possible — some establishments are so extensive that this cannot be done and they are passed along to an assistant. The department will have a list of the men authorized to sign requisitions and they must be examined to see that they are signed by a properly authorized person and that the classification of material is stated. In a manufacturing establishment it may be necessary to check it with production order, also with maximum and minimum

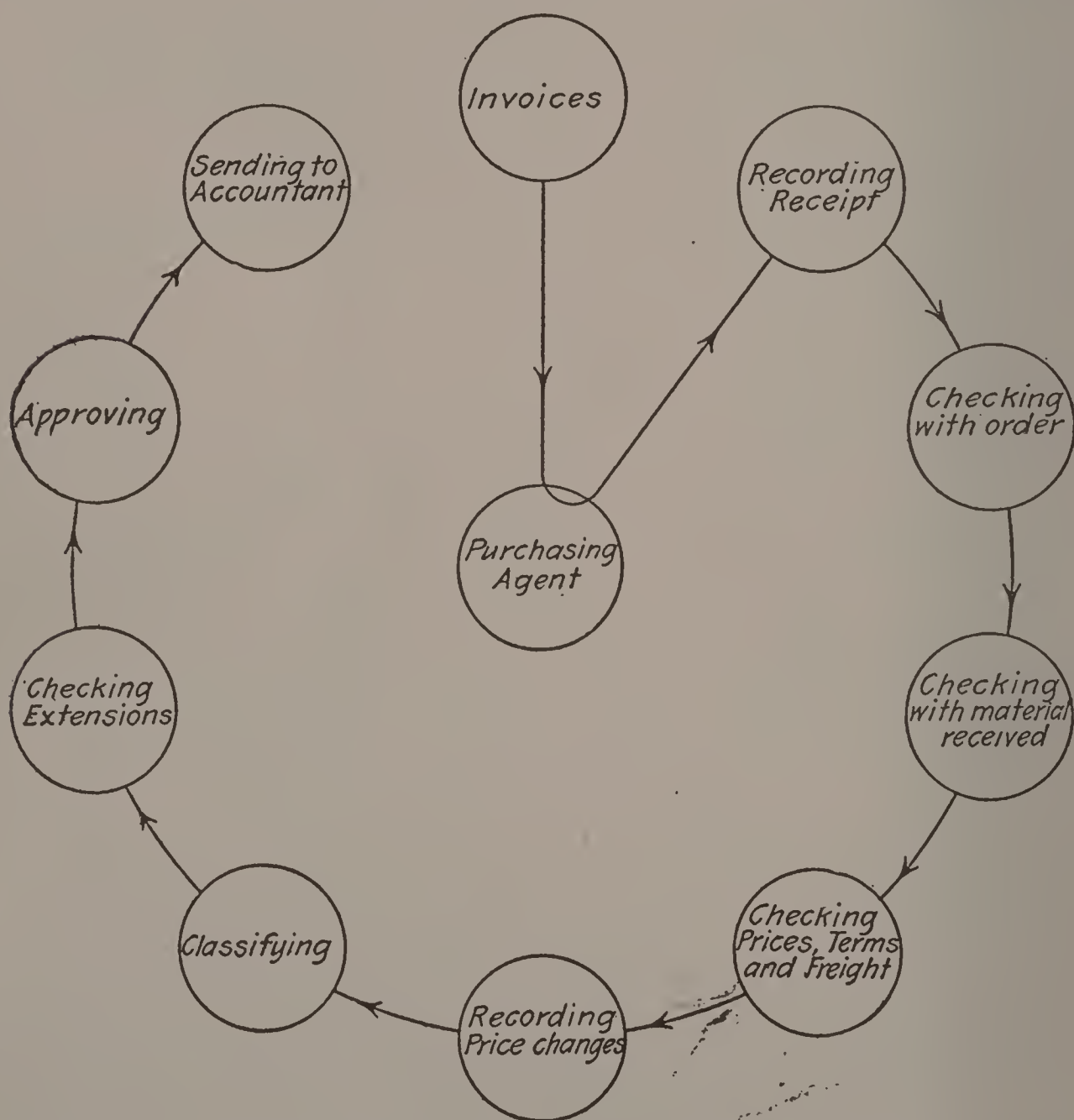


FIGURE No. 9.—Invoices must go through a fixed course and over a route which will insure their being systematically checked and approved as indicated in this chart.

and past purchases. The proper specification of material will have to be obtained from records and attached to requisition. The price will then be investigated, and if it is an established one, the order can probably be placed at once; if not, quotations will have to be obtained and compared, submitted to purchasing agent for final negotiating, and will then follow the same course as those orders for which no quotations were obtained. The chart clearly indicates the final course the orders take.

Invoice Procedure

All invoices coming into the purchasing department follow a course similar to that outlined in Figure 9. The various steps are shown with sufficient clearness to enable the procedure to be closely followed. In some establishments some of these steps may be cut out; such as, checking with material received, and checking extensions, which may be done in the accounting department. All the features connected with the approval of the invoices have to be accomplished in one department or the other before they are vouched for payment.

Stores Procedure

Figure 10 shows the system followed by the storekeeper. On the left the course of procedure is indicated in receiving and checking, storing and recording material. On the right are the deliveries of material to, also material received back from, shop. All three of these finally get on to the perpetual inventory and from there follow an identical route. Scrap received into stores is shown on a course of its own, so also is

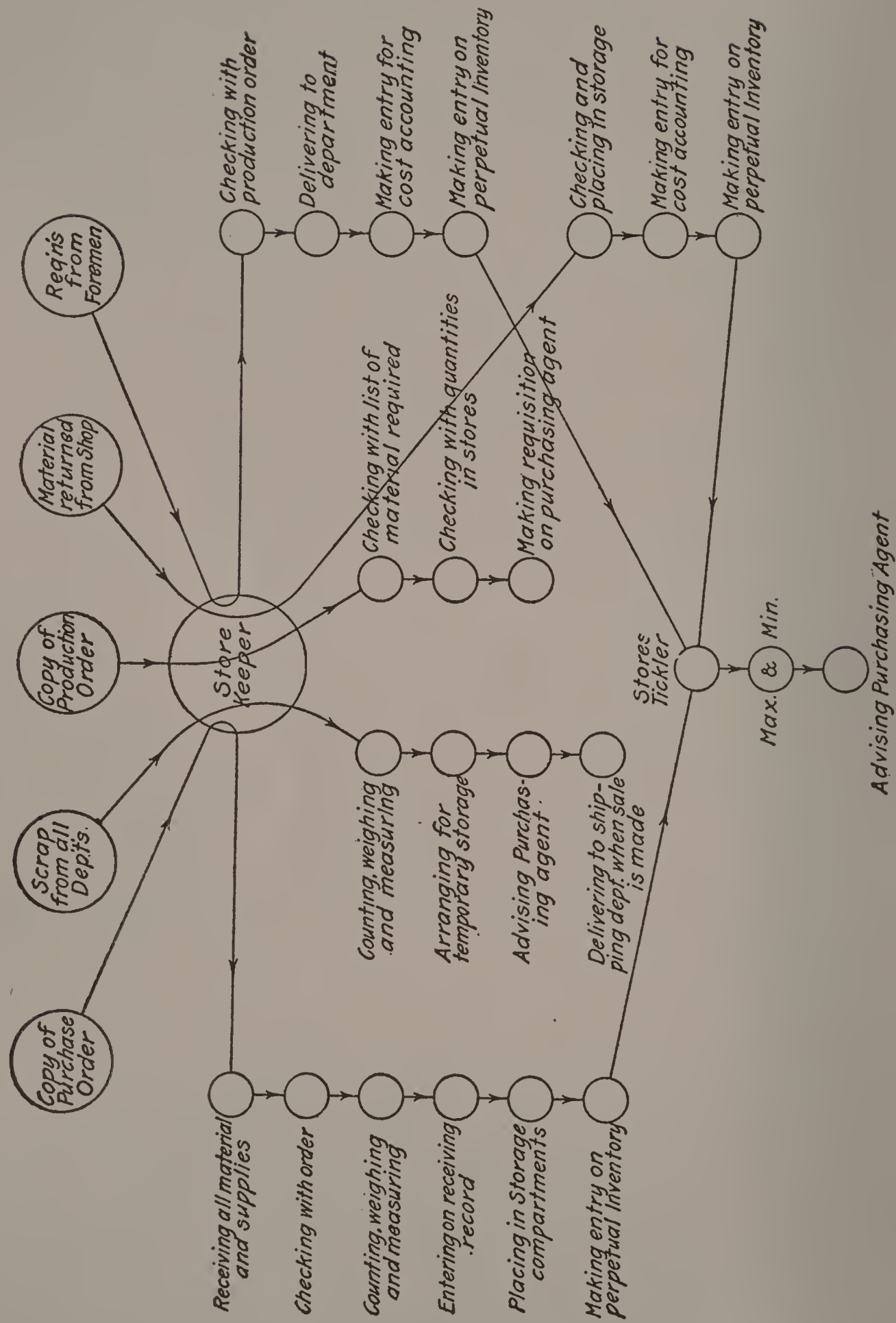


FIGURE No. 10.—Chart of stores procedure.

the work connected with production orders, if this is handled by the storekeeper.

Inspection Procedure

Inspection is not properly part of the internal work of the purchasing department, and is not therefore shown on above charts. Nevertheless it cannot be ignored in arranging the methods of procedure. Copies of certain orders with instructions must be sent to the inspector and reports will be received from him. Invoices may have to be held until these come in. The relation which inspection bears to the other functions of the organization is shown in Figure 5 in the preceding chapter.

Traffic Procedure

If the work connected with transportation matters is handled in the purchasing department, a system of doing it must be devised on the following lines. Information and data must be recorded and kept handy for reference in a manner similar to that outlined for purchasing records. The system of records must comprise the following:

- Freight classification of goods.

- Rates from his own and competitors' shipping points.

- Switching and terminal charges.

- Record of business done with each railroad company.

The following is the routine work which will have to be systematized:

- Defining the manner in which goods shall be packed.

- Routing of all freight.

- Making arrangements with transportation companies for shipments.

Arranging for all teaming.

Tracing shipments when delayed.

Getting proper receipts for shipments.

Checking and approving all freight and teaming charges.

Handling all claims against transportation companies.

A reference to Figure 5 shown in preceding chapter will indicate where the traffic function comes in contact with the other work of the organization.

CHAPTER VIII

OBTAINING AND TABULATING PROPER RECORDS

The Collection and Recording of Data and Information

THE following chapters will describe the actual operation of a purchasing department. In doing this a description or illustration of the forms to be used and any other equipment which may be required for doing the work will be given. The compiling, assembling, and keeping the data and records, while perhaps not the most important section of the work of the office, have been mentioned first in previous chapters and will be so dealt with here. It is essential that it be kept in compact and concise form and intelligently arranged for easy reference. It is not radically different from corresponding work in any other office, but there are some special features connected with it which need close observation.

One thing which should never be lost sight of is that there is no finality to this work. When a requisition comes into the department and is disposed of in the regular way, the order placed, material received, and invoice approved, that requisition and order are "dead." It is quite different with the recording of information, as this must be kept active and alive. It is true that some recorded data will become obsolete, such as prices for instance, but these should be superseded by prices which are current and represent

the market of today. A price or quotation may be five years old and yet if it represents the latest market figure it is alive and in force.

The accumulation of reliable records is probably more essential for the purchasing office than for any other department of a business. It is the memory portion of the brain of the department. A substantial proportion of these records can be compiled from the actual transactions which take place in the department itself, but there are other facts which are necessary accessories and which can be obtained from the other departments and from outside sources. A reference to Figure 7 in last chapter will make this better understood.

Some offices will require much more information than others — it will depend on the nature of the business. The staff should, then, be organized to take care of this condition. The methods of doing this work will be outlined, but it must be remembered that in very small establishments it will only take part of the time of one person, while in very large ones several people may be engaged on the work.

The purchasing agent should energize the movement and appoint some member of his staff to take charge of it. His personal activity will be necessary in occasionally visiting the sources from which he is getting his largest and most important supplies and other plants manufacturing goods of a similar nature. By observation and inquiries he will learn a great deal which will be very useful. Notes of all these points should be made and properly recorded on his return to the office. These visits of the purchasing agent will enable him to get some impressions and will give

him a mental picture which will be exceedingly valuable and which could never be acquired from any data obtained through other channels.

Catalogues

It is a practice with some purchasing agents to decry the utility of catalogues. Certainly some of them do not tell one much, and if they are accompanied by a price list and discount sheet they are used merely to get a comparative price. For any purchase of importance an endeavor should be made to secure better figures. Nevertheless, it must be admitted that there comes a time when catalogues are perused and assiduously searched for some particular thing or information. This is the experience of both large and small buyers. It is expedient therefore to obtain a good library of catalogues which bear any relation to the character of the purchases.

If one goes into any public library some good ideas can be obtained about storing and keeping books for ready reference, also the amount of space required, the necessary clearances, average size of books, depth of shelves, etc. If it is proposed to establish an extensive catalogue library, it would be advantageous to have special bookcases, shelves, and receptacles made. They will prove to be cheaper than extension bookcases and can be arranged to suit the space available. There are several methods of filing the catalogues and the best is undoubtedly to arrange them according to size. It will be found that they can be segregated into about six dimensional divisions and the shelves can be spaced to suit. There will be a great many more catalogues of the medium sizes than

of the largest or smallest, therefore more shelf space must be allotted to these.

This scheme will work out somewhat as shown in Figure 11. All catalogues must be numbered on a label pasted on the back, or if the book is not sufficiently large then paste it on the front in the left-hand top

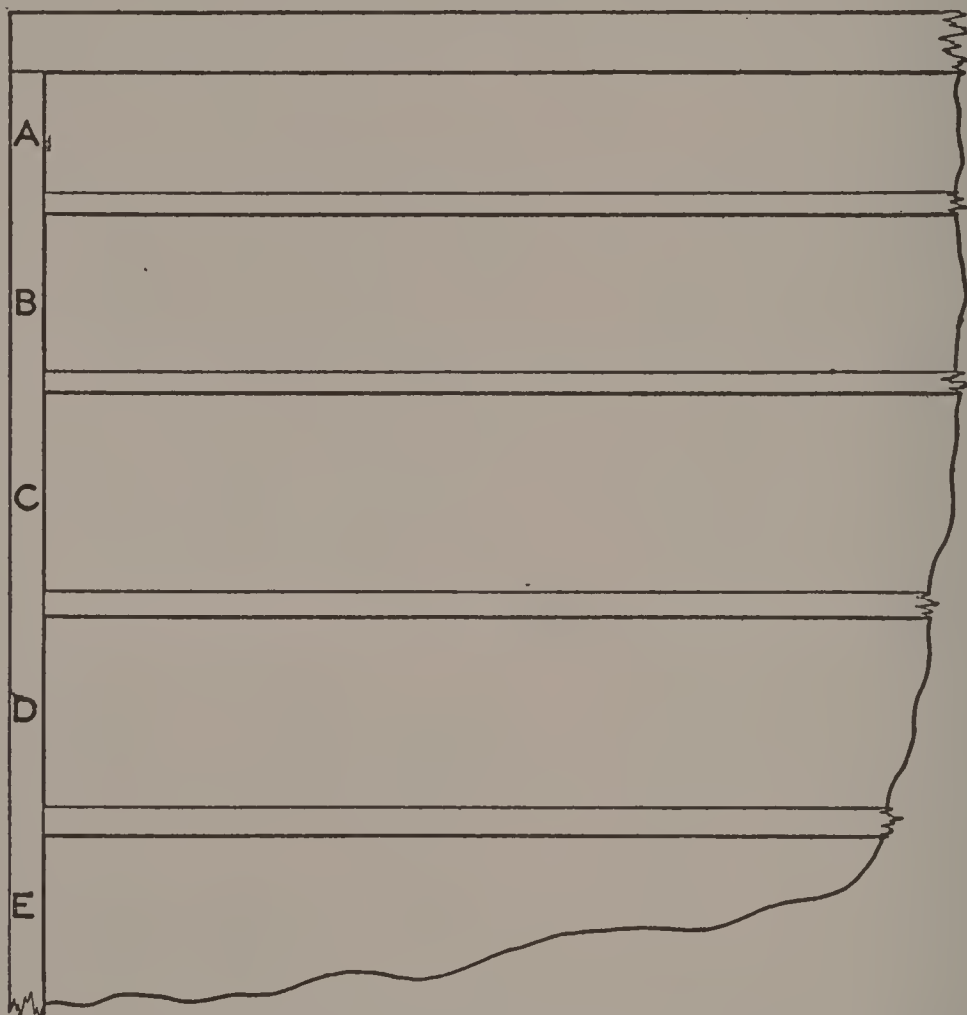


FIGURE No. 11. — Sketch of arrangement of shelves for catalogues.

corner. Commence numbering the top row one and upwards. If it is a small case, the second row will commence at 200, the third row at 300, and so on. Larger catalogue cases can have the second row commence at 500, the third at 1000, etc. But perhaps a better way, if the collection is very large, is to commence the top row $\frac{A}{1}$, second row $\frac{B}{1}$, third row $\frac{C}{1}$, etc. All these methods are distinctive in that they design-

nate which shelf the catalogue is on and it can be located instantly. If the shelves are exceptionally long, they can be subdivided by distinctive numbering for each section. This can easily be figured out as the catalogues accumulate.

The shelves as described take care of all stiff, bound catalogues, but there will be also a great many pamphlets, circulars, etc., which it will be necessary to keep and file. These can be placed in folders similar to correspondence folders, keeping as far as possible all printed matter on one subject in the same or adjacent folders.

MATERIAL

NAME OF MANUFACTURER	ADDRESS	SHELF	CAT.No.
.....
.....
.....
.....
.....
.....
.....
.....
.....

FIGURE No. 12.—Card for indexing catalogues under name of material. Size 4x6 inches. Color should contrast with card shown in figure No. 13.

All catalogues will then have to be cross indexed, filing one card, as shown in Figure 12, under the material or subject index and the other, Figure 13, under the index “manufacturers” or “suppliers.” These two cards should be different colors, as this is a precaution against their being placed in the wrong filing drawer.

It is sometimes found convenient to keep the drawers containing these index cards on the desk or within reach of the person using them most frequently. If,

NAME OF MAN'F'R.	SHELF	No.
ADDRESS	A	48
LIST OF MATERIAL MANUFACTURED		
.....		
.....		
.....		
.....		
.....		
.....		

FIGURE No. 13.—Card for indexing catalogues under name of manufacturer.
Size 4 x 6 inches.

however, the bookcase has been built specially, it is possible for it to be so designed as to include these drawers, also the drawers for folders as an integral part of it, making all the catalogues, pamphlets, circulars, and their indexes self-contained in one piece of furniture. See sketch, Figure 14, which illustrates approximately the manner in which this can be done.

Sources of Supply

The record of sources from which materials, goods, and supplies can be obtained should be revised constantly and kept up to date. It is not sufficient to keep a list of manufacturers from whom purchases are regularly made. They may be the ones who have been best able to supply requirements in the past and

are in the best position to do so at present, but changes are continually taking place and new manufacturers coming into the market better equipped perhaps than the old ones. If the market seems too narrow or it is felt it is not broad enough for purchases to be made to the best advantage, then persistent

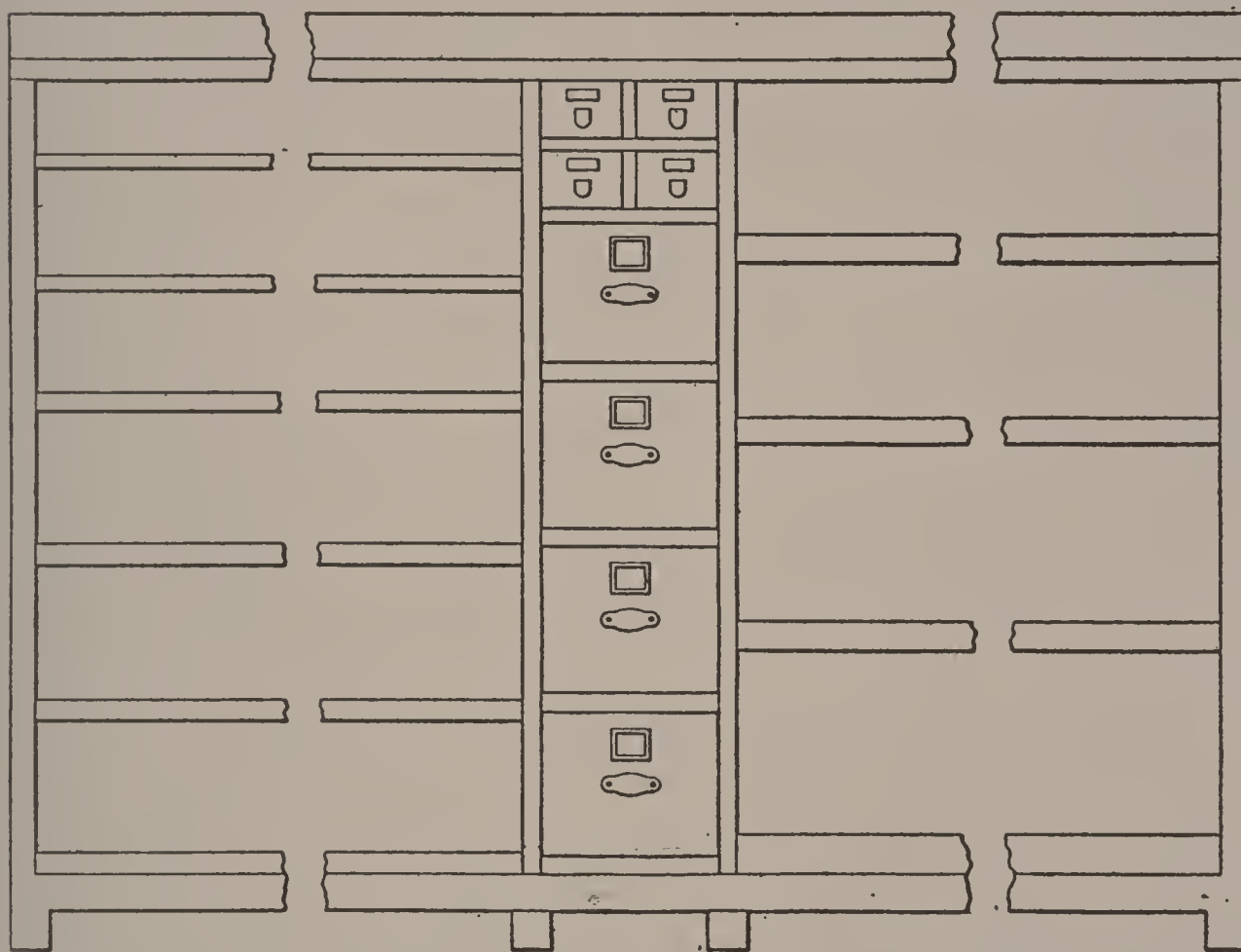


FIGURE No. 14.—Sketch of book case for catalogues showing arrangement for filing pamphlets and circulars, with index drawers.

endeavors should be made to obtain information to rectify this. Tabulate any data acquired, make notes from correspondence before it is filed as to character of goods made by concern the letter was from, also notes of anything salesmen say they are prepared to quote on or supply. A great deal of valuable information will soon be accumulated which can be collected on cards, if the market is assiduously searched.

There is a limit to this as a point is finally reached where the supplier is located at such a distance from where the material is to be consumed that questions of freight and time might prohibit their being considered. To make all the purchasing records of greatest value, they must represent good live buying prospects, and not be encumbered with useless and unnecessary information.

Some offices rely on the catalogue index cards for recording these data, but it is not advisable. Keep those cards for the one purpose only. The form of card needed, or the one best suited for the purpose, will depend on the nature of the business. A suggestion for a card is offered, see Figure 15. A code rating of one's own can be adopted which will signify the financial standing of the supplier, whether he makes shipments promptly, whether there has been any trouble with his goods; in fact, all information that will be useful and which can be put on the card in an abbreviated form.

This record of sources of supply is intended to furnish information not given in catalogues. It will keep the purchasing agent posted as to where he can buy cheapest and best and get treated right. A salesman keeps himself posted as to good live prospects, why not the buyer? Inquiries will then reach only those who are keen for the business, and the quotations received will represent the best prices obtainable from the most reliable sources. Undesirable bidders will be eliminated when inquiries are sent out, and a remarkably high percentage of efficiency maintained.

MATERIAL		DESCRIPTION SPECIFICATION No.									
NAME OF M'F'R	ADDRESS	PLANT			PREVIOUS SERVICE AND REPUTATION					CAT. No.	REMARKS
		Location	Distance	Capacity	Keeping Promises	Shipping Promptly	Quality	Business Methods	Financial Standing		
.....
.....
.....
.....
.....
.....
.....
.....

FIGURE No. 15.—Record of sources of supply showing where purchases can be made to best advantage. A card 8 x 10 inches can be used or loose leaf ledger sheets as found most convenient.

Record of Past Purchases

A combination may be effected by some concerns in recording some of the other information. Where a record is kept of purchase orders, it is sometimes done in such a way as to analyze the heaviest purchases, by which the totals for the year can be found with the prices paid; but it is not entirely satisfactory, for it frequently means a complication of figures which do not convey clearly and concisely the desired information. There are many manufacturing establishments which do not have the faintest conception of the quantities of each article or material which they buy in a year, or any given period, but just order in a haphazard way for immediate requirements or when stock is low. Very little work is entailed in keeping a record of such purchases, and when the consumption for a given period is a known quantity, buying can be done more intelligently and to better advantage. It is patent to any one that if a purchasing agent has definite and positive information, such as indicated, he can face the market with assurance and not be buying quantities on guesswork. Such data also would be exceedingly valuable to the persons in charge of the various departments where the goods were used.

A record should be kept of everything with prices paid. Simple forms for this purpose are shown in Figures 16 and 17. These can be elaborated on as much as necessary, so long as useful information is being recorded, but duplication should be avoided. In small establishments the stores perpetual inventory may be used for this purpose if it is kept in the purchasing office, but if not, one cannot send to the storekeeper

MATERIAL									
DATE	ORDER No.	PURCHASED FROM	LIST	DISCOUNT	NET	FREIGHT	DELIVERED	UNIT COST	TOTAL VALUE PURCHASED
.....
.....
.....

FIGURE No. 17.—Record of material purchased, an alternate to figure No. 16. This form gives unit cost. Both No. 16 and No. 17 also serve to show fluctuations in prices paid. Size 8 inches wide, length to suit. Loose leaf sheets can be used if desired.

to obtain this information every time it is needed. The main object to be served is to have a correct account of the total quantity, also the total value purchased of each article during three, six, or twelve months, with the prices paid. This will give an excellent basis on which to estimate the requirements for a similar period ahead, and one can go into the market intelligently, obtain better prices, and arrange deliveries exactly in accordance with the known wants. The sizes mentioned as suitable for forms shown in Figures 16 and 17 can, of course, be changed to include any additional information which individual conditions demand.

The Purchase Record

A complete record of all purchases is a positive necessity in some establishments for financial reasons. The purchasing agent may be called upon at any time to say what the exact amount of the purchases is for a given period, and how much will become due for payment in the following month or within a specified time. In other places this necessity may not exist, but nevertheless a record should be kept. It is not wise for the buyer to go along placing orders, not knowing the aggregate value of the material and supplies purchased. He may not be exceeding the maximum allowable, and he may be buying strictly for the requirements of the business, but if the purchases are for delivery one, two, three, or even four months ahead, he should know the value of the transactions he has closed and the man in charge of the finances should know the exact amount of the obligations he has to take care of.

DATE	ORDER No.	PURCHASED FROM	MATERIAL	QUANTITY	PRICE	VALUE AND MONTH OF PAYMENT			
.....
.....
.....

FIGURE No. 18.—Purchase record with an arrangement for analyzing the value of purchases over three months. By extending the width of sheet additional columns can be added for as many months as desired.

Figure 18 shows a method of recording orders with a scheme for analyzing the dates of payment over the three subsequent months. The totals for each of these months can be kept in pencil figures each day and a summary of the three at end of the month will be the grand total of the purchases for that month. This information, also the information on past purchase record, would be posted from the copies of purchase orders in much the same way as invoices are posted into a ledger.

There have been forms designed which combine the four following records on one sheet:

Purchase order record.

Invoice record.

Stores record.

Material price record.

It is possible there is a business the nature of which would permit this to be done, but it has never come under the notice of the writer. The idea is to enter the amount of order in first column, in the second column a record of invoice, the third and fourth columns being for stores record. But such a scheme makes it imperative that there shall be only one invoice for each order issued, one entry into stores, and the whole material delivered from stores at one time, because there is only one line used for each order. It is an impossible condition in any ordinary business, but is given here as a suggestion, as some might be able to adopt it. Generally, however, it can be demonstrated that separate records are very much better from every point of view. If too many records and figures are kept on one sheet they have a tendency to become so involved as not to be readily decipher-

DATE	ORDER No.	PURCHASED FROM	MATERIAL	QUANTITY	VALUE	REMARKS
.....
.....
.....

FIGURE No. 19.—Purchase record form which can be used as a substitute for Figure No. 18. Both of these are intended for use as loose leaf sheets and should have a margin for binding. Size 8½ inches wide.

able. Practically little additional work is necessary in keeping separate records.

Record of Quotations

The record of quotations, Figure 20, will be compiled from various sources. Salesmen who call are always ready to quote prices for something they are interested in, but which at the time may have no immediate interest for the purchasing agent. A note should be made to go on the quotation card, also any prices quoted in correspondence. Even if it is something not bought before, keep a record; it is a good thing to know prices of any article. While it is not to be inferred that records should be kept of goods which are absolutely and entirely foreign to the business one is engaged in, nevertheless the widest possible knowledge of prices is valuable to a purchasing agent. Common-sense should determine how far to go in this direction. When the comparison of quotations card is made up from inquiries sent out, turn it over to the record clerk and let him post the prices on this form; they will be valuable for future reference. It is not necessary to duplicate the record of prices already posted on the card of past purchases; that card is a record of goods actually bought. The quotation card should contain quotations from other firms for similar material, together with all other prices which can be collected from time to time.

Specifications

Standard specifications should be drawn up for all material used in production work, and for supplies of every kind and nature used around a plant there

MATERIAL			DESCRIPTION									
MANUFACTURER'S NAME	QUANTITY	UNIT	LIST	DISCOUNT	NET PRICE	TERMS	FREIGHT	NET COST DELIVERED	QUOTATION MADE BY	DATE	FILE NO.	REMARKS
.....
.....
.....
.....
.....
.....

FIGURE No. 20.—Record of quotations. This is distinct from the record of prices of goods already purchased.
Size of card 8 x 10 inches.

should be a proper description, clear, concise, and worded in such a manner as to leave no misconception in the mind of bidders or suppliers as to the article mentioned. When this information is obtained and understandingly collected for easy reference, it serves many good purposes. It will enable the purchasing agent to secure prices without any doubts arising among the bidders as to what is actually wanted, and will prevent references being made back to him for more definite information. The purchasing agent will positively know when he receives bids that they have all figured on the same grade of material, and his comparison of quotations will mean real competitive prices.

This procedure will also enable the various supplies used in a plant to be standardized. One department may requisition a certain size and kind of broom, another department may requisition the same kind but a different size. It may be found that one size of one description will answer for the whole establishment. All office furniture and stationery should be standardized. The furniture is then interchangeable and can be bought to better advantage. One can go into many large offices and find two or three makes of filing cabinets, whereas one manufacturer would have been glad to supply all that was required, and at a lower price than was paid for the separate purchases.

The specifications of material used in production can be drawn by the engineers, based on scientific knowledge of what is required, and on the action of the material in the course of its manipulation through the shop and in the finished product. These specifications may be short or lengthy. They should be type-

written or printed according to the frequency with which the orders are issued and the quantity used, and kept ready to send out with inquiries or orders. The original copy with copies of all changes, modifications, or amendments should be kept in folders and indexed. The description of supplies can in many cases be condensed, and entered on the heading of the card recording past purchases.

Inspection Reports; Analyses and Tests

All reports made by the inspectors on material during progress of fabrication and before shipment to the buyer, belong to the division of the office having charge of the routine work in following up the orders; but these reports should pass through the hands of the record clerk so that he can note on his records any items in them which would make his information more complete. Some establishments keep an inspector for examining all material on arrival at factory and his reports should be sifted in like manner. A large amount of valuable and instructive data can be gathered from these to be posted on the sources of supply record, Figure 15. A form of inspection report is shown in Chapter X, Figure 36.

In construction work inspection and tests are made of all important purchases of material before shipment and where this is not done samples are taken after delivery, of such things as cement, steel castings, etc. for the purpose of analyzing and testing. Copies of these analyses should go to the purchasing agent's office and be put on record.

In a manufacturing plant, if a laboratory is maintained for making chemical analyses and machines

for physical tests are available, it puts a powerful weapon in the hands of the purchasing agent. He can have recourse to these and determine positively that he is being supplied with what he bought. These analyses and tests are also exceedingly helpful to the engineering department and the ability to determine the composition and strength of materials is of great utility and economic value to the production department. Many manufacturers depend on the suppliers to make tests and suggest to them the most suitable composition of their raw material, thus placing themselves under obligations to them. With one's own laboratory the experiments can be carried on in the plant and without outside assistance, which leaves the purchasing agent a free hand in buying. The tests made for production, engineering, or purchasing department should go on record in a similar manner to the specifications. This applies also to all reports, tests, or observations made on material and supplies during progress through, or use in, the whole establishment. Consistently kept up, it will result in a remarkably high degree of efficiency in securing the very best materials and supplies for the satisfactory and economical operation of any plant, and the maintenance of its product at a fixed standard of excellence.

CHAPTER IX

WORK CONNECTED WITH REQUISITION

Examining and Checking Requisition

THE requisition is in some respects the most important document which comes into the purchasing department. It is the basis for all purchases; from it emanate practically all the activities associated with every purchase; in fact no purchase should be made without a requisition. Owing to its importance it is absolutely essential it should be thoroughly checked and examined to enable the subsequent work connected with it to proceed with accuracy and dispatch. After perusing the remarks which follow in regard to the preparatory work on a requisition, it will be fully realized how necessary it is to have the information records described in the last chapter in good shape and fully up to date.

A form of requisition is shown in Figure 22 which would answer for a manufacturing establishment; for some kinds of construction work it is not so suitable. Modifications can be made in any of the forms illustrated here as the needs of the case dictate. Whatever the nature of the business there must be a requisition for every purchase made. It may be in duplicate or triplicate according to the method of procedure. In most cases it is in duplicate, the original going to the purchasing department, and the copy being kept in the department where it originated. In such cases a

copy of the purchase order would be sent to the maker of the requisition. An alternative method is to send two copies to the purchasing department, where one is marked with order number, date of delivery, and other particulars, and returned to the maker.

PURCHASE REQUISITION	
○	DATE _____ REQ. No. _____
	REQUIRED FOR _____ ACCT. No. _____
	DELIVERY WANTED _____ DELIVER TO _____
	QUANTITY IN STOCK _____ MAX. _____ MIN. _____
○	
○	
○	APPROVED _____ SIGNED _____
	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>THIS SPACE FOR USE IN PURCH'G DEPT.</p> </div> <div style="flex: 1; border-left: 1px solid black; padding-left: 10px;"> <p>CHECKED BY _____ SPEC. No. _____</p> <p>PRICE _____ TERMS _____ ORDER No. _____</p> <p>ORDERED FROM _____</p> </div> </div>

FIGURE No. 22.—Purchase requisition. This form is suitable for a manufacturing establishment and can be of a size convenient to describe the goods usually requisitioned.

The former method is usually preferred as it involves less work.

It is absolutely imperative that the requisition should be signed by some authorized person, and that the quantity and description of material required be clearly and distinctly stated; also date delivery is wanted. These things are indispensable in any

[illegible]

FIGURE No. 23.—Form of requisition used by Neptune Meter Co. Size 5 x 8 inches in triplicate.

requisition; other information is necessary in some cases, but optional in others. Requisitions for material going into storeroom should state quantity on hand, maximum and minimum allowable, and for what purpose required. These particulars are not always available in construction work, but other details, depending on location and class of work, would be necessary.

The requisitions must be numbered. If the business is a very large one with many departments, they can be numbered when printed and a letter placed before the number to distinguish the department, or they can be numbered as they arrive in the purchasing department. In the latter case the copy kept by the department making the requisition can have its number inserted when they receive copy of order, as it will appear on that.

Requisitions for some materials and *always* for supplies should be made at regular and stated intervals. This will enable the purchasing agent and storekeeper to keep better track of the quantities being used, will enable the purchasing agent to buy fixed quantities at stated periods, and will simplify the work of both offices and make the course of procedure easier.

All requisitions should, if possible, go through the purchasing agent's hands. In some offices this is not feasible owing to the large number of requisitions which come through for small items. These can be dealt with by an assistant, but the more important requisitions should have the personal attention of the head of the department. All requisitions will first be examined to see whether they have been signed by

[illegible]

FIGURE NO. 24. — Form of Requisition used by Nichols Copper Co. Size 8 x 11 inches. This is] in triplicate and embodies a complete history of the purchase. See reverse side of requisition on next page.

some person with the necessary authority to do this. A list of the persons authorized to make requisitions should be kept in the department. They must then be checked with production order and with the maximum quantity or amount the purchasing agent is allowed to order. They should then be compared with record of past purchases. The object of this being to ascertain the quantity used in a given period, and to determine whether they should be bought in larger or smaller quantities. In this connection the unit cost of delivery has to be considered. The purchasing department is not a commission house and some latitude must be allowed it. Always, however, strictly in conformity with the known requirements of the business.

It will also be necessary to see that the material is properly described or specified, and if necessary a copy of the standard specifications must be attached to the requisition. It has already been pointed out that standard specifications and proper descriptions are very essential, in fact they are indispensable to good buying.

Pricing Requisitions

It may be found that the requisition is for material for which a price has been agreed for a fixed period with a supplier, also terms and time required for delivery. In such cases the order can be made out at once, provided the requisition has passed the preliminary checkings and examinations satisfactorily.

Frequently arrangements can be made to have the material carried in stock by the manufacturer and taken as required by the purchaser. The prices

Form E 60 4-1-24 5M

WARNER SUGAR CORPORATION

EDGEWATER, N. J.

REFINERY REQUISITION

REQUIRED
FOR

19

CHARGE

No C 1287

DEPARTMENT REQUISITION
SIGNED BY

APPROVED:

MANAGER

MAKE ORDER TO

O. K.

PURCHASING AGENT

FIGURE No. 26. — Form of requisition used by Warner Sugar Corporation.
Size 8 x 9 inches.

would of course have been arranged to cover a period of probably six or twelve months, the buyer being protected on an advancing market, with the benefits of a declining market accruing to him. It may look as if the seller is taking big chances of making losses instead of profits, but it is an economical possibility for such business to be done with advantages for both sides, and probably all good purchasing agents secure in some way the benefits of this form of buying.

In determining whether the quantities requisitioned should be increased or decreased, there are many factors to be taken into consideration. The larger quantity might be bought cheaper with lower transportation charges, but against this must be balanced the disadvantages of stocking too much material and the losses it would entail in unremunerative investment, additional insurance, space occupied, possible depreciation, etc. There are many other considerations also to be carefully weighed which were gone into fully in previous chapters.

Obtaining Quotations

When a requisition covers material for which there is no agreed price with the supplier, or when the price agreement expires, new quotations must be obtained. For this purpose a form similar to Figure 27 can be used. Reference should be made to the sources of supply card already described, and the inquiries sent to as many firms as are necessary to get the lowest prices, best material, and suitable delivery. A copy of this inquiry with a list of all people it was sent to must be kept with the requisition until finally disposed of.

615-5M 9-20

REQUISITION ON PURCHASING DEPARTMENT

RICHMOND RADIATOR COMPANY

No. _____ Plant or Branch _____

(NAME) (DATE)

We will need _____ Account No. _____

(WHEN)

by _____ the following: _____

(ROUTE AND FREIGHT OR EXPRESS)

SPECIFICATIONS	DATE OF COUNT	STOCK ON HAND

Goods to be used for

REMARKS:

Date Ordered.....

Order No.....

From.....

RICHMOND RADIATOR COMPANY

By

N. B.—BE EXPLICIT. GIVE FULL INFORMATION AND DETAILS

THIS SPACE IS FOR PURCHASING DEPARTMENT'S MEMORANDA.

FIGURE No. 28.—Form of requisition used by Richmond Radiator Company. Size 8½ x 11 inches.

Form 116-10M-2-25-13

PURCHASING DEPARTMENT

NICHOLS COPPER COMPANY

IN REPLY REFER TO QUOTATION

INQUIRY NO. _____

LAUREL HILL

BOROUGH OF QUEENS

NEW YORK

TELEPHONE

8816-7-8-9-30 HUNTERS POINT

M

Please quote us on the material listed below. To insure your quotation being given attention you are requested to comply with following points.

A separate price must be given for each item.

A definite delivery date must be named.

State whether prices are F. O. B. shipping point or destination.

This quotation is wanted by _____

H. B. TWYFORD

Purchasing Agent

FIGURE No. 30.—Form used by Nichols Copper Co. for obtaining quotations. Size 8½ x 11 inches. These bear the same number as the requisition on which they apply, rendering their identification with it very easy.

When these quotations arrive in the office, they should be entered on a card or sheet similar to Figure 33. It may be found more convenient to enter the names of all the people who have been invited to tender on this card at the time the inquiries are sent out. It can then be readily seen when all the quotations are in. These quotations will have to be very carefully considered and analyzed and scrutinized from all angles; questions of freight and time of delivery must be taken into account, as well as the reputation and past performances of the bidders. There may be substitutes offered which deserve investigation. Having weighed all these matters carefully and everything else being equal, the question of price should be the deciding factor. All of these points would of course be passed upon by the purchasing agent himself, the comparative statement of the bids having been drawn up and submitted to him by the price clerk.

Final Negotiations

It may be necessary at this stage, if the order is an important one, for the purchasing agent to interview some of the bidders in reference to certain phases and details of their quotations, which will enable him possibly to obtain better terms, arrange shipments to fit in accurately with the known requirements, and in doing this make it easier for the financial department.

When formal invitations have been sent out asking for quotations, then letters of declination should be sent to unsuccessful bidders. Business courtesy demands this, and time and trouble can be saved by

COMPARISON OF QUOTATIONS

MATERIAL _____ DATE _____ REQ. No. _____

BIDDER'S NAME	PRICE	TERMS	FREIGHT	NET	SHIPMENT PROMISED	REPUTATION	PREVIOUS SERVICE
.....
.....
.....
.....

ORDER PLACED WITH _____ DATE _____ ORDER No. _____

REASON _____

FIGURE No. 33.—Comparison of quotation card. Size 6 x 8 inches.

doing it. Neglect in notifying bidders imposes on the purchasing agent or department the necessity of answering by telephone and correspondence questions regarding quotations which have long since been disposed of.

JOHN DOE & COMPANY

360 CANNON ST.

NEW YORK

To _____

GENTLEMEN,

Referring to your quotation of _____
for _____

we have to advise you that we have been able to obtain more favorable figures than those named by you, and the order has been placed.

Thanking you for the attention you have given the matter, we are

Yours very truly,

JOHN DOE & COMPANY.

Purchasing Agent.

FIGURE No. 34.—Form of circular letter notifying bidders that the order has been placed.

If all the features leading up to this stage of the transaction are reviewed, it should reveal a situation in which the purchasing agent can be positive he is in a position to close it on the most favorable terms and conditions possible. Starting with his sources of supply record, if this has been kept up in good shape, he knows that the people he has asked for quotations

are the very best in the country to furnish him with what he wants, he knows they are in a better position to quote him favorable prices and to give him best service. He has arrived at this conclusion by a process of selection and elimination. He knows his specifications have been correctly and accurately drawn. He knows from his records of past purchases and future requirements the exact dates on which he must have delivery, and having arranged terms and method of payment he can confidently close with the assured feeling that he has done his very best, and brought the negotiations to a successful conclusion.

In concluding this chapter it is desired to call attention to the various requisitions illustrated. There are features in each of these which can receive the careful consideration of the student. Emphasis is laid on the fact that the requisition must have the approval of some constituted authority before action is taken on it by the purchasing department.

CHAPTER X

WORK CONNECTED WITH ORDERS

THE fundamental difference between a requisition and an order is that the former is for use within one's own organization and carries no obligation to another concern whereas an order may be a very serious contractual obligation. This fact must never be disregarded. Its legal aspects will be discussed in a later chapter.

Method of Handling

The order form varies considerably, in fact it would be difficult to find two with exactly similar wording, but there are essential features in all which are intended to convey the same interpretation. Figures 35 and 36 show forms of orders which will be found suitable for many concerns. In filling in the body of the order it should be stated definitely, clearly, and concisely what is required. If a lengthy specification is necessary, then it should be referred to by a distinctive number or letter and date, and a copy attached to the order. Any drawings, blue prints, or sketches should likewise be quoted, and they should accompany the order. If it is an order for some minor supplies, such as twine or wrapping paper, specify exactly what is required. The proper description of all the standard supplies should be on file and should be referred to. A great deal of time may be saved by doing this. A manufacturer would probably have several grades or kinds, all of which might come

under an incomplete description, which means that information would be requested as to which was required, and consequently delay would occur.

Some orders are sent out with an attachment for acknowledgment, but this is not recommended. It is treated in a very perfunctory manner. It is probably better to enclose a post-card (see Figure 43), as this scheme gets more recognition and can be used to obtain a promised date of shipment. Another good purpose served is that the post-card, being the same size as tickler card, can be filed with it in the follow-up file. The whole story of acknowledgment and promises regarding the order are then kept together.

Several copies of the order have to be made. Some use a card for the copy to be kept in the purchasing office, but if the card is stiff it does not give satisfaction in the typewriter and a good impression is not obtained. A copy is usually sent to the department which made the requisition, sometimes a copy to the storekeeper, and sometimes to the accountant, depending on the methods in vogue. The printing on all copies need not be the same, but they should register and the spacing should be arranged to suit the typewriter, as this saves considerable time. All copies should be distinctive as to color, as this facilitates distribution and prevents any mix up.

The example given of an order form (Figure 35) is numbered in the right-hand top corner, as it is intended to keep the office copy in a post binder, and in this position the number is more readily seen. The numbering should be done when printed and should be in large, bold figures. A few extra order sheets

with numbering omitted can be kept on hand for use in replacing spoiled sheets so that there is no break in the numbering. The margin on the left would in the copies be blank and perforated for binding. If it is not desired to have the price appear on any of the copies, it can be omitted by inserting a slip when the order is being written, or using short carbons.

Before mailing the order, it should be checked. A stenographer may add a cipher making it read 2000 instead of 200, or make an error in the size of an article, the consequences of which might be serious and involve the concern in heavy financial losses.

Having got rid of the original, the copies can be sent out to the departments interested. The requisition which would have been in use until now, can be permanently filed away. A post binder is best for this purpose; it enables a large number of them to be kept in compact form and easy reference can be made to them at any time. The order number should be inserted on the requisition and the requisition number on order. The copy of order remaining in the purchasing department should be filed in a similar way, but it will be temporarily placed in the "live" file of uncompleted orders and later transferred to the permanent file when complete deliveries have been made.

Immediately the order is sent out, the purchase order record must be posted from it, also the record of past purchases and prices. Both of these operations have been described in a previous chapter and illustrations given of some forms suitable for the purpose.

Following up Orders

If an order has been placed under the most favorable conditions as to price, terms, and date of ship-

Purchase Order Number must appear on Shipping Receipt, Invoice, Correspondence, or any communication connected with this order.	JOHN DOE & COMPANY	
	360 CANNON ST., NEW YORK CITY	
	Date_____Req. No._____Purchase Order No. 3047	
	To_____	
	Address_____	
	Please ship to_____	
	Shipment to be made_____via_____	
	TERMS_____	PRICE

	Purchasing Agent.	

FIGURE No. 35.—Form of order.

ment, still the whole economic value of the purchasing department might be lost if the goods were not delivered on time. If they were for a factory, it might

JOHN DOE & COMPANY 360 CANNON STREET NEW YORK	DATE_____	PURCHASE
	REQ. No._____	ORDER No._____
	To_____	

PLEASE SEND US THE UNDERMENTIONED GOODS :

Shipment to be made_____via_____

Acknowledge receipt of this order stating whether you can ship on date named.

IMPORTANT

Invoices must be rendered
in duplicate and bear
above order No.

Purchasing Agent.

FIGURE No. 36.—Form of order as a substitute to Figure No. 25.

Form N. Y. O. 18 8-18-24 10M 84th

WARNER SUGAR CORPORATION
PURCHASING DEPARTMENT
 79 WALL STREET, NEW YORK.
 PHONE 1600 BOWLING GREEN

PURCHASE ORDER No. **F 8102**

M

PLEASE FURNISH THE FOLLOWING MATERIAL, CONSIGNED TO DESTINATION GIVEN BELOW, IN ACCORDANCE WITH CONDITIONS GIVEN ON BACK OF THIS ORDER, WHICH, WHEN THIS ORDER IS ACCEPTED BY YOU, WILL CONSTITUTE PART THEREOF.

QUANTITY	ARTICLE	PRICE

THIS ORDER IS PLACED CONTINGENT UPON THE ARTICLES CALLED FOR HEREIN, HAVING BEEN MANUFACTURED OR PRODUCED IN A PLANT OPERATED IN ACCORDANCE WITH THE U. S. CHILD LABOR LAW OF SEPTEMBER 1ST, 1918. ALL INVOICES MUST BE STAMPED WITH THE FORM OF GUARANTY PRESCRIBED BY THE FEDERAL BOARD OR THEY WILL NOT BE PASSED FOR PAYMENT.

CORRECT

TERMS OF DELIVERY

WANTED: _____ { IF YOU CANNOT FILL THIS ORDER BY THIS DATE ADVISE AT ONCE

F. O. B. _____

SHIP VIA _____

WARNER SUGAR CORPORATION

PURCHASING AGENT

WARNER SUGAR CORPORATION
 PURCHASING DEPARTMENT
 79 Wall Street, New York

We acknowledge receipt of your order dated _____ 19____ and numbered **F 8102** and accept all the conditions imposed therein. and will ship all materials enumerated in said order on _____ 192

Date _____

THIS ACKNOWLEDGMENT TO BE SIGNED IN INK BY THE PERSON AUTHORIZED TO ACCEPT ORDERS FOR THE INDIVIDUAL FIRM OR CORPORATION FOR WHOM THIS ORDER IS INTENDED AND TO BE RETURNED TO US PROMPTLY.

FIGURE No. 37.—Form of order used by Warner Sugar Corporation.
 Size 8½ x 11 inches.

CONDITIONS

QUALITY:

All materials furnished must be the best of their respective kinds, and will be subject to our inspection and approval at any time within thirty days after delivery. If not up to specifications they will be held for disposition at your risk and expense.

QUANTITY:

The quantity of material must not be exceeded without our permission in writing being first obtained.

DELIVERY:

This order will be subject to cancellation, at purchaser's option, if delivery is not effected within the time stated on this purchase order, unless prevented by unforeseen circumstances and delays beyond your control.

ROUTING:

All material must be forwarded by the particular route named, otherwise the difference in freight and extra cost of cartage will be charged to your account.

BILLS:

Itemized bills in duplicate giving the correct purchase order number must be sent at time of each shipment accompanied by a copy of the manifest and bill of lading, otherwise we cannot prevent delays in payment of your account.

DRAFTS:

No draft for purchases made by this company will be honored.

CARTAGE:

No charge will be allowed for cartage, packing or reels unless by special agreement.

STATEMENT:

Send statement of account the first of each month.

NOTICES:

A notice must be sent to us as soon as material has been forwarded on account of this purchase order, giving number of order, kind of material, shipper's name, car number and initials, and route by which forwarded.

DISCOUNT:

Show cash discount on invoice.

The above are the conditions printed on the reverse side of Figure 37 (Warner Sugar Corporation order). In connection with this order the following is quoted from the remarks of Mr. J. R. Pels who designed it.

"I really take a little pride in the order form which we have compiled from experience derived from a good many years of purchasing and I think it is as nearly law proof as any that can be gotten out.

When the recipient of the order signs the slip at the bottom of same and returns it to us, we have a legal and binding contract with him which he cannot get away from. In the conditions on the reverse side of the order, under the heading "Deliveries," we were compelled to add the "Circumstances and delays beyond Seller's control" clause as before that time nearly every order was returned to us. It, however, gives us some legal standing regarding deliveries which we formerly did not have. The New York Office copy, as you will note, is an exact duplicate of the original and has on the reverse side space for entering deliveries on the order. We place the acceptance slip received from the seller on this New York Office copy which, therefore, makes it an acceptance of our order and compels the seller to make delivery. We are very particular to see that this acceptance slip is returned to us *properly filled in.*"

Please return this acknowledgment to

Consolidated Gas Company of New York

PURCHASING DEPARTMENT

130 East 15th Street
New York City

_____ 19

We beg to acknowledge receipt of your Order No. **42829** Delivery will be made, subject to conditions endorsed hereon,
on or about _____

Signed _____

Telephone, Stuyvesant 6900

Consolidated Gas Company of New York

PURCHASING DEPARTMENT

130 East 15th Street,
New York City

**PUT THIS ORDER
No. 42829
ON YOUR INVOICE
AND ALL PACKAGES**

A. F. MACKLIN
PURCHASING AGENT
J. M. KNOWLES
ASST. PURCHASING AGENT

DELIVER AT **DEPT.**

Subject to conditions endorsed hereon.

Req. No.	Quantity	Description of Material
TERMS:		

Itemized shipping memorandum must accompany each delivery noting thereon this Order Number.
If shipment is made by freight, forward bill of lading to delivery address.
All invoices must be rendered upon the forms furnished by this Company and forwarded to
Accounting Department, 130 East 15th Street, New York, N. Y.

Consolidated Gas Company of New York,
(OVER) _____
PURCHASING AGENT.

U. S. PAT. NO. 1,247,151 JAN. 16, 1918
Form 177 10M

FIGURE No. 38.—Size 8½ x 11. Six carbon copies are made of this order, two copies being retained in Purchasing Department, one for permanent record and one for price recording. One copy goes to Accounting Department and three to Receiving Department.

RICHMOND RADIATOR COMPANY

ORDER 29241

1480 BROADWAY COR. 42ND ST.
NEW YORK

PLEASE SHIP

TO

VIA

(NAME OF PLANT MUST SHOW ON ADDRESS)

F O B
TERMS

(DRAFTS WILL NOT BE HONORED UNDER ANY CIRCUMSTANCES)

Please acknowledge receipt, state when you will ship, and show order number on all papers and packages.

Please attach B/L to invoice in duplicate and mail to this office as soon as shipment is made.

We do not agree to any charges except as stated on this order.

We reserve the right to charge to you any costs resulting from your failure to comply with the instructions on this order.

Orders subject to cancellation, at our option, in case of strikes, fires or conditions beyond our control.

RICHMOND RADIATOR COMPANY

ORDER 29241

Purchasing Agent

FIGURE No. 39.—Order form used by Richmond Radiator Company.
Size 8½ x 11 inches.

Form 63-534-4-24

NEPTUNE METER COMPANY

MANUFACTURERS OF

TRIDENT WATER METERS

TRIDENT-DISK

TRIDENT-CREST

TRIDENT-COMPOUND

TRIDENT-PROTECTUS

Date

Name

Address

Ship to NEPTUNE METER CO.
Jackson Ave. and Crane St., Long Island City, New York.

Shipping Directions

Please furnish the following articles and send Invoice and Shipping Receipt or Bill of Lading for each consignment.

Note on each Invoice order and requisition numbers.

This order must not be filled at higher prices than last quoted or charged, without advice.

Freight or expressage to be prepaid unless by special agreement before shipment is made.

No attention will be paid to bills for Supplies furnished without a written order from Purchasing Agent.

Payments are made by vouchers only No drafts for purchases made by this department will be honored.

Separate bills must be made for each order

This order must be filled by date promised, or it may be cancelled without further notice.

This number must be placed on each package and invoice.


J. SHIPMAN,
Purchasing Agent.

Order No. 25907

Requisition No.

QUANTITY	SIZE	DESCRIPTION	PRICE

N. B.—Acknowledge receipt of this order and advise when shipment will be made.



Render Invoice in duplicate and mail to Purchasing Agent, 192 Jackson Avenue, Long Island City, N. Y.

Statement first of each month.

NEPTUNE METER COMPANY,

By Purchasing Agent

(Detach and return this acknowledgement by return mail.)

NEPTUNE METER CO.
Purchasing Department,
192 Jackson Ave., Long Island City, N. Y.

Your Order No. is received and accepted; will ship material as ordered on, or before, 192

Signed

FIGURE No. 40.—Order form used by Neptune Meter Company. Size 8½ x 11 inches with a detachable slip for acknowledgment, 2¾ x 8½ inches.

PURCHASING DEPARTMENT

NICHOLS COPPER COMPANY

LAUREL HILL.
BOROUGH OF QUEENS

NEW YORK

1

Order No. 27526

Do not fail to put above order number on invoice.
Send invoice and duplicate to this office as soon as shipment is made.
If delivery has been promised from stock it must be so made and invoice complete.

Requisition No.

Job No.

Date

M

PLEASE DELIVER TO

Price

Terms

F. O. B.

Ship via

Wanted

NICHOLS COPPER CO.

Purchasing Agent.

Form No. 350. 1-34

FIGURE No. 41.—Order form used by Nichols Copper Company. Size 8¼ x 8½ inches.


PURCHASE ORDER NO. 11453

REQ. NO.

TO

ADDRESS

VULCAN



WM. M. CRANE COMPANY

18-20 EAST 41ST ST., NEW YORK

DATE

SHIP TO		VIA
	QUANTITY	ARTICLE
1		
2		
3		

Invoices must be rendered in duplicate
All communications must be addressed to
18-20 EAST 41ST, ST. NEW YORK
ORDER NUMBER MUST APPEAR ON ALL PACKAGES

WM. M. CRANE COMPANY

PURCHASING AGENT

FIGURE No. 42.—Order form used by Wm. M. Crane Company. Size 5¼ x 8¼ inches.

have to work overtime to complete a contract or perhaps lose it altogether, and in construction work the non-arrival of material of only one class might delay the work of every class of mechanics. It is very important therefore that this phase of the work receives close attention. There are many schemes in vogue for taking care of it. A good one is given here and suggestions regarding others. A tickler system, to be efficient in securing results, must be prosecuted with energy. It comes into being with the placing of an order, has a short and vigorous life, and dies when shipments on order are completed.

DATE_____

This acknowledges receipt of your Purchase Order No._____

Dated_____For_____

Shipment will be made_____

SIGNED_____

FIGURE No. 43.—Post-card to be enclosed with order to secure an acknowledgment. Size 4 x 6 inches.

Tickler Systems

Many concerns send out with the order some form of acknowledgment which usually contains a space in which a promise can be inserted regarding shipment as already suggested (see Figure 43). It may be advisable in some cases to send a copy of the order with the original and have an acceptance indorsed on its face. In any case the date of shipment should

be recorded on the tickler card, Figure 44. This card should then be placed in the tickler file under the date goods should be shipped, or in advance, to enable a clerk to send a notice to the party holding the order. The date should be noted on copy of order to insure locating the card promptly.

If these cards are kept in force, no shipment dates can be overlooked, because they come up automatically each day. Under the space headed "nature of tickler" or "promise" a memorandum should be made

NAME_____DATE_____No._____

DATE OF TICKLER	NATURE OF TICKLER OR PROMISE	DATE OF PROMISE
.....
.....
.....
.....

FIGURE No. 44.—Tickler card for following up orders. Size 4 x 6 inches.

of each inquiry sent out regarding the order and each reply. This obviates looking up correspondence. Some purchasing departments keep a tickler system by using thirty-one pigeon holes, one for each day in the month, and placing the cards or an additional copy of the order in them, but the file system is preferable. It can be made to cover as many months as desired, takes up less space, and is more convenient. When an order is completed the card is of no further value and can be destroyed.

Another scheme for a tickler system is to have an additional copy of the order made and file it in a date file, such as already described, sufficiently in advance of the actual date of shipment so that a follow-up notice can be sent to shipper in time to insure its dispatch on the specified date. This extra copy need only be made of those orders on which a follow-up is necessary, and it can have special rulings on back if desired for the purpose of noting promises regarding shipments. If the card system is not adopted this

To_____

GENTLEMEN,

Our records show that you have our Order No._____

Dated_____ Calling for_____

Please advise when shipment will be made using return portion of this card.

Yours very truly,

DATE_____

FIGURE No. 45.—Reply post-card to obtain promise as to date of shipment.

scheme will be found excellent; it dispenses with the work of making out the tickler card and all information regarding the follow-up is self-contained on the copy of the order which is a great advantage as with the card system there is sometimes a necessity to refer back to the order.

It is necessary to remind the seller of the approaching date of shipment. Some orders are so important that inspectors have to be on the ground and report progress. In other cases a strong letter from the purchasing agent is sufficient, but for the ordinary run of orders a printed form will probably answer the

purpose. It can be simply a request for date of shipment or worded imperatively as occasion demands. The reply post-card scheme brings very good results (see Figure 45), and an advantage connected with this is that the reply half of the card can be filed with the acknowledgment card, Figure 43, and the tickler card, Figure 44, thus keeping all cards together pertaining to following up the order.

If it is desired to send out a printed letter form of inquiry regarding shipment, something similar to Figure 46 is suggested. This would answer the purpose for those concerns who object to the use of post-cards. If a form similar to this is used it can be done in conjunction with the scheme outlined above for using a copy of the order for the tickler system. By having the form shown in Figure 30 the same size as the order it can be filed with it which is a great advantage.

Recording Shipments

There are innumerable schemes for recording shipments made against an order. The best for any particular case will largely depend on the nature of the orders themselves. If they are mainly for articles which will be dispatched in one shipment, it is easy to arrange the copy of the order, which remains in the purchasing agent's office, with a space on the face of it which can be used for recording the shipment. But where the orders are mostly for large quantities and the execution of them involves many shipments, the back of the copy of the order can be ruled for keeping the record (see Figure 35 in next chapter). It is of great importance to obtain prompt advice

of these shipments and have the traffic man follow them up, particularly in those cases where a manufacturing establishment is not carrying a heavy stock of raw material, but working on a very close margin.

JOHN DOE & COMPANY

360 CANNON ST.
NEW YORK CITY

_____19

To_____

Please advise us immediately when you will make shipment of our order No._____dated_____using space below for reply.

Yours truly,

Purchasing Agent.

=====

NOTE.—If whole or partial shipment has been made give particulars of same.

DATE_____

The material referred to on above order will be shipped on_____

from_____via_____

REMARKS :

Shipper.

FIGURE No. 46.—Request for information as to shipment of an order.
Size should be the same as the copy of order with which this will be filed.

In these cases the supplies must come in regularly and promptly. There are also certain raw materials which from their nature cannot be carried in stock any great length of time, and frequent and regular deliveries are necessary. When the information regarding a shipment has been properly recorded in the purchasing office, the advice or a notification of it should be turned over to the traffic man and to the storekeeper or receiving clerk to enable them to take care of their duties in expediting delivery and in receiving and arranging storage. Frequently the shipping advice, invoice, and bill of lading will all come in together.

After all material has been received as called for on the order, and the invoices have been checked against it, it should be withdrawn from the "live" file and placed in the completed or "dead" file. The orders can be kept indefinitely for reference at any time and owing to the manner of filing them very little space is required to store several thousands with their accompanying requisitions and other records connected with them.

The method outlined will fit with modifications a great diversity of businesses whose activities are widely different. There are some, however, in which the procedure would have to be varied from that described. Take for instance a concern which issued comparatively few orders, but each order involved considerable correspondence and there was a large accumulation of papers in connection with each one. In such a case it would not be advisable to scatter the correspondence and reports through the general file, but all of the documents connected with the order

[illegible]

FIGURE No. 50.—Form used by Warner Sugar Corporation for reporting receipt of material. Size 8½ x 11 inches.

should be collected in a folder, including copy of order, comparison of quotations, etc. It would be found that reference to such papers would be much easier if kept in this way.

Emergency Orders

Even in the best regulated establishments there will be occasions when orders have to be given for material and supplies without going through all the various procedures usually regarded as necessary and prudent and which are outlined in this chapter. No amount of foresight on the part of the purchasing agent is a protection against a lapse by a member of some other department to remember something. A breakdown in the shop or an accident to, or failure of some material being fabricated may be the occasion of rush orders. If there is no time to obtain quotations a well organized purchasing office can confidently issue an order, knowing that the complete and authentic records which are in the office will enable the clerk who checks the invoice to do so intelligently and not approve it unless a fair price is charged.

In such cases as cited in last paragraph it is the practice of some purchasing agents to send a form letter to the party with whom the order is placed asking them to name the price. On receipt of this the regular official order is issued. This enables the order clerk to insert the price on every order issued, which is a regulation strictly adhered to in some offices. Probably, however, the material would be shipped before price was received and it is no protection against an excessive price being charged. There are some purchasing offices who from the very nature

of the business must issue a great many such orders daily, and in those cases dependence must be placed on the records of prices kept in the offices to secure fair and just treatment. This emphasizes the importance of keeping all information and data in good shape and up to date.

Contracts

As already stated in previous chapters any agreement made between buyer and seller is a contract. This is true even of a verbal offer to buy and a verbal acceptance. It is also true of a written order when accepted by the seller. That which is usually designated a contract however is a document on which the signature of both parties appears.

Contracts to buy and sell are of so many kinds that it would be impossible to attempt to fully describe them. There are certain fundamentals however in all such contracts which must be strictly adhered to. These will be discussed in a later chapter on the legal aspects of purchasing. The object of the present chapter is to illustrate some of the forms of contracts which the purchasing agent has to negotiate most frequently.

For this purpose we cannot do better than to take a series of contract forms used by the Western Electric Company. These are exceptionally complete and cover all that is usually requisite in making contracts for supplies over a given period of time.

Contracts for machinery and apparatus for equipment purposes are usually executed on the forms compiled by the manufacturer of the particular

machine which they themselves make and quite often descriptions and technical references are inserted which would not be applicable in any other contract.

FIGURE No. 51.—First sheet of contract.

<p>A. L. SALT, VICE-PRESIDENT W. F. BANCKER, GENERAL PURCHASING AGENT, NEW YORK</p>	<p>Western Electric Company INCORPORATED TELEPHONE AND TELEGRAPH BUILDING 195 BROADWAY NEW YORK</p>	<p>GENERAL CONTRACT NO. SHEETS SHEET NO. DATE</p>
<p>THIS IS NOT A SHIPPING ORDER</p>		

DDS-1 IT IS AGREED THAT YOU WILL MAINTAIN AT ALL TIMES DURING THE TERM OF THIS CONTRACT A STOCK OF INSPECTED MATERIAL IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

DDS-2 IT IS AGREED THAT WE WILL ISSUE FROM TIME TO TIME A MANUFACTURING SCHEDULE OR WILL ISSUE SHIPPING INSTRUCTIONS COVERING THE QUANTITY OF MATERIAL HEREUNDER SO AS TO PROVIDE A REASONABLY UNIFORM RATE OF PRODUCTION.

DDS-3 IT IS AGREED THAT YOU WILL INVOICE US AS OF FOR SUCH MATERIAL MANUFACTURED BY YOU AND FOR WHICH WE HAVE NOT ISSUED SHIPPING INSTRUCTIONS AS HEREIN PROVIDED.

DDS-4 AS TO SUCH MATERIAL NOT MANUFACTURED AS OF WE SHALL HAVE THE OPTION, TO BE EXERCISED WITHIN A PERIOD OF FIFTEEN DAYS THEREAFTER, EITHER OF TREATING THIS CONTRACT AS BREACHED OR OF CONTINUING THIS CONTRACT FOR A PERIOD NOT TO EXCEED THREE MONTHS, IN WHICH LATTER EVENT YOU AGREE TO MANUFACTURE WITHIN THIS PERIOD THE REMAINING QUANTITY OF THE MATERIAL NOT SO MANUFACTURED. IN THE EVENT THAT SHIPPING INSTRUCTIONS HAVE NOT BEEN ISSUED FOR SUCH MATERIAL WITHIN THE THREE MONTHS' PERIOD, YOU WILL, AT THE EXPIRATION OF SUCH THREE MONTHS, INVOICE US FOR SUCH MATERIAL.

DDS-5 IT IS AGREED THAT TITLE TO THE MATERIAL COVERED BY THIS CONTRACT SHALL VEST IN US AS AND WHEN IT IS INVOICED BY YOU TO US IN ACCORDANCE WITH THE TERMS HEREOF.

DDS-6 IT IS AGREED THAT ALL MATERIAL INVOICED TO US AND CARRIED BY YOU AS OUR PROPERTY WILL BE PROPERLY STORED BY YOU AND SHIPPED AS SPECIFIED BY OUR ORDERS WITHOUT FURTHER CHARGE TO US, PROVIDED SUCH SHIPPING INSTRUCTIONS ARE GIVEN WITHIN A PERIOD OF SIX MONTHS AFTER THE EXPIRATION DATE OF THIS CONTRACT. IT IS UNDERSTOOD THAT THE STORAGE OF THIS MATERIAL DOES NOT OBLIGATE YOU TO PAY FOR ANY INSURANCE OR TAXES ON THE SAME.

DDS-7 IT IS AGREED THAT UPON OUR REQUEST YOU WILL PLAINLY MARK SUCH STOCK OF MATERIAL SO INVOICES AS BEING OUR PROPERTY AND WILL EXECUTE AND DELIVER A BILL OF SALE IN FORM ACCEPTABLE TO US TOGETHER WITH SATISFACTORY EVIDENCE THAT THE MATERIAL IS FREE FROM ALL LIENS, CHARGES OR INCUMBRANCES.

DDS-8 DELIVERY AS ORDERED, BILL AS SHIPPED, EXCEPT AS OTHERWISE HEREIN PROVIDED.

DDS-9 YOU AGREE TO SHIP ONLY INSPECTED MATERIAL ON ALL ORDERS PLACED WITH YOU APPLYING ON THIS CONTRACT UNLESS SPECIFICALLY AUTHORIZED TO THE CONTRARY BY OUR ENGINEERING INSPECTION DEPARTMENT.

(8-196 3-24) (CONTINUED)

FIGURE No. 52.—Second sheet of contract specifying a definite quantity, a definite period and a minimum stock.

A. L. SALT,
VICE-PRESIDENT
W. F. BAHCKER,
GENERAL PURCHASING AGENT,
NEW YORK

Western Electric Company

INCORPORATED

TELEPHONE AND TELEGRAPH BUILDING
195 BROADWAY
NEW YORK

THIS IS NOT
A SHIPPING ORDER

GENERAL CONTRACT
NO.
SHEETS
SHEET NO.
DATE

(BROUGHT FORWARD)

SUPPLIER'S SERVICE INSTRUCTIONS:

ORDERS:_____WESTERN ELECTRIC BRANCH HOUSE ORDERS APPLYING AGAINST THIS CONTRACT WILL BE SENT TO YOU THROUGH THE TELEPHONE SUPPLIES SERVICE DIVISION, 195 BROADWAY, NEW YORK CITY.

RECAPITULATION FORMS:_____ORDERS WILL BE ACCOMPANIED BY A RECAPITULATION FORM WHICH SHOULD BE FILLED IN AND RETURNED PROMPTLY TO THE TELEPHONE SUPPLIES SERVICE DIVISION. SHOULD ANY ORDERS APPLYING ON THIS CONTRACT REACH YOU WITHOUT A RECAPITULATION FORM ATTACHED, THEY SHOULD BE IMMEDIATELY RETURNED TO THE TELEPHONE SUPPLIES SERVICE DIVISION.

BILLING:_____SEND ORIGINAL AND DUPLICATE INVOICE TO THE ORDERING HOUSE AND THE TRIPPLICATE COPY TO THE TELEPHONE SUPPLIES SERVICE DIVISION AS SOON AS SHIPMENT IS MADE. INCLUDE PREPAID TRANSPORTATION CHARGES ON YOUR INVOICE FOR THE MATERIAL PROVIDED YOUR INVOICE CAN BE RENDERED WITHIN TWENTY-FOUR HOURS. IF THE INCLUSION OF SUCH CHARGES MEANS A LONGER DELAY THAN THIS, RENDER YOUR INVOICE FOR THE MATERIAL IMMEDIATELY AND A SEPARATE INVOICE TO COVER THE PREPAID TRANSPORTATION CHARGES AS PROMPTLY AS POSSIBLE THEREAFTER. IN CASE OF SHIPMENTS FROM OUR PAID-FOR STOCKS, INVOICE SHOULD SHOW THE QUANTITY OF MATERIAL SHIPPED WITHOUT PRICE OR EXTENSION, AND SHOULD COVER THE BILLING FOR ANY PREPAID TRANSPORTATION CHARGE.

SHIPPING NOTICES:_____IN CASE OF AN UNAVOIDABLE BILLING DELAY SEND A SHIPPING NOTICE TO THE ORDERING HOUSE AND A COPY TO THE TELEPHONE SUPPLIES SERVICE DIVISION AS SOON AS SHIPMENT IS MADE.

RETURN POST CARDS:_____WHEN RETURN POST CARDS ARE USED BY THE TELEPHONE SUPPLIES SERVICE DIVISION SOLICITING SERVICE INFORMATION ON ORDERS, THEY SHOULD BE RETURNED PROMPTLY WITH DEFINITE SHIPPING ADVICE OR A RELIABLE PROMISE.

MONTHLY REPORTS:_____ON OR ABOUT THE FIRST OF EACH MONTH, WE WILL SEND YOU A SUPPLIER'S MONTHLY REPORT FORM IN DUPLICATE. ORIGINALS SHOULD BE FILLED IN AS OF THE FIRST OF THE MONTH AND RETURNED PROMPTLY TO THE TELEPHONE SUPPLIES SERVICE DIVISION. THE DUPLICATE BEING RETAINED BY YOU.

IMPORTANT:_____ALL QUESTIONS ON ORDERS APPLYING ON THIS CONTRACT SHOULD BE TAKEN UP WITH THE TELEPHONE SUPPLIES SERVICE DIVISION AND NOT WITH THE ORDERING HOUSE DIRECT.

ACCEPTED THIS _____ DAY OF _____ 19 _____

SUPPLIER: _____

BY _____

WESTERN ELECTRIC COMPANY
INCORPORATED

BY _____
VICE-PRESIDENT

(E-906 8-24)

FIGURE No. 53. — Third sheet of contract.

<p>A. L. SALT, VICE-PRESIDENT W. F. BANCKER, GENERAL PURCHASING AGENT, NEW YORK</p> <p>THIS IS NOT A SHIPPING ORDER</p>	<p>Western Electric Company INCORPORATED TELEPHONE AND TELEGRAPH BUILDING 195 BROADWAY NEW YORK</p>	<p>GENERAL CONTRACT NO. SHEETS SHEET NO. DATE</p>
---	--	---

DD-1 IT IS AGREED THAT THE RATE OF MANUFACTURE OF SAID MATERIAL SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

DD-2 IF SHIPPING ORDERS ARE ISSUED FOR SHIPMENT DURING ANY PERIOD IN EXCESS OF THE ABOVE SCHEDULE, MANUFACTURE SHALL BE INCREASED, IF POSSIBLE FOR SUCH PERIOD SO AS TO FULLY COVER SUCH SHIPPING ORDERS. SUCH INCREASES IN EXCESS OF THE ABOVE SCHEDULE HOWEVER, SHALL NOT INCREASE THE TOTAL QUANTITY OF MATERIAL HEREUNDER.

DD-3 IT IS AGREED THAT YOU WILL INVOICE US AS OF SUCH MATERIAL SO MANUFACTURED AND FOR WHICH WE HAVE NOT ISSUED SHIPPING INSTRUCTIONS. AND FOR

DD-4 AS TO SUCH MATERIAL NOT MANUFACTURED AS OF WE SHALL HAVE THE OPTION, TO BE EXERCISED WITHIN A PERIOD OF FIFTEEN DAYS THEREAFTER, EITHER OF TREATING THIS CONTRACT AS BREACHED OR OF CONTINUING THIS CONTRACT FOR A PERIOD NOT TO EXCEED THREE MONTHS, IN WHICH LATTER EVENT YOU AGREE TO MANUFACTURE WITHIN THIS PERIOD THE REMAINING QUANTITY OF THE MATERIAL NOT SO MANUFACTURED. IN THE EVENT THAT SHIPPING INSTRUCTIONS HAVE NOT BEEN ISSUED FOR SUCH MATERIAL WITHIN THE THREE MONTHS' PERIOD, YOU WILL, AT THE EXPIRATION OF SUCH THREE MONTHS, INVOICE US FOR SUCH MATERIAL.

DD-5 IT IS AGREED THAT TITLE TO THE MATERIAL COVERED BY THIS CONTRACT SHALL VEST IN US AS AND WHEN IT IS INVOICED BY YOU TO US IN ACCORDANCE WITH THE TERMS HEREOF.

DD-6 IT IS AGREED THAT ALL MATERIAL INVOICED TO US AND CARRIED BY YOU AS OUR PROPERTY WILL BE PROPERLY STORED BY YOU AND SHIPPED AS SPECIFIED BY OUR ORDERS WITHOUT FURTHER CHARGE TO US, PROVIDED SUCH SHIPPING INSTRUCTIONS ARE GIVEN WITHIN SIX MONTHS AFTER THE EXPIRATION DATE OF THIS CONTRACT. IT IS UNDERSTOOD THAT THE STORAGE OF THIS MATERIAL DOES NOT OBLIGATE YOU TO PAY FOR ANY INSURANCE OR TAXES ON THE SAME.

DD-7 IT IS AGREED THAT UPON OUR REQUEST YOU WILL PLAINLY MARK SUCH STOCK OF MATERIAL SO INVOICED AS BEING OUR PROPERTY AND WILL EXECUTE AND DELIVER A BILL OF SALE IN FORM ACCEPTABLE TO US TOGETHER WITH SATISFACTORY EVIDENCE THAT THE MATERIAL IS FREE FROM ALL LIENS, CHARGES OR INCUMBRANCES.

DD-8 DELIVERY AS ORDERED, BILL AS SHIPPED, EXCEPT AS OTHERWISE HEREIN PROVIDED.

DD-9 YOU AGREE TO SHIP ONLY INSPECTED MATERIAL ON ALL ORDERS PLACED WITH YOU APPLYING ON THIS CONTRACT UNLESS SPECIFICALLY AUTHORIZED TO THE CONTRARY BY OUR ENGINEERING INSPECTION DEPARTMENT.

(B-199 2-24) (CONTINUED)

FIGURE No. 54.—This is substituted for figure No. 52 when a definite production schedule is specified.

A. L. GALT,
VICE-PRESIDENT
W. F. BANCER,
GENERAL PURCHASING AGENT,
NEW YORK

Western Electric Company

INCORPORATED

TELEPHONE AND TELEGRAPH BUILDING

185 BROADWAY

NEW YORK

GENERAL CONTRACT

NO.

SHEETS

SHEET NO.

DATE

THIS IS NOT
A SHIPPING ORDER

MM-1 IT IS AGREED THAT THE RATE OF MANUFACTURE OF SAID MATERIAL SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE.

MM-2 IF SHIPPING ORDERS ARE ISSUED FOR SHIPMENT DURING ANY PERIOD, IN EXCESS OF THE SCHEDULE AS SHOWN ON SUCH OTHER SCHEDULES AS WE MAY ISSUE, NOT TO EXCEED THE MAXIMUM COVERED BY THIS CONTRACT, MANUFACTURE SHALL BE INCREASED, IF POSSIBLE FOR SUCH PERIOD SO AS TO FULLY COVER SUCH SHIPPING ORDERS. SUCH INCREASES IN EXCESS OF THE SCHEDULES AS SHOWN, HOWEVER, SHALL NOT INCREASE THE MAXIMUM QUANTITY OF MATERIAL HEREUNDER.

MM-3 IT IS AGREED THAT WE WILL ISSUE FROM TIME TO TIME A MANUFACTURING SCHEDULE OR WILL ISSUE SHIPPING INSTRUCTIONS COVERING THE MINIMUM QUANTITY OF MATERIAL HEREUNDER AND WITHIN THIRTY DAYS PRIOR TO THE EXPIRATION DATE HEREOF, WE SHALL HAVE THE OPTION OF ISSUING AN ADDITIONAL MANUFACTURING SCHEDULE OR SHIPPING INSTRUCTIONS COVERING THE MAXIMUM QUANTITY AS ABOVE SET FORTH.

MM-4 IT IS AGREED THAT YOU WILL INVOICE US AS OF _____ AND _____ FOR SUCH MATERIAL SO MANUFACTURED AND FOR WHICH WE HAVE NOT ISSUED SHIPPING INSTRUCTIONS.

MM-5 AS TO SUCH MATERIAL NOT MANUFACTURED AS OF _____, WE SHALL HAVE THE OPTION, TO BE EXERCISED WITHIN A PERIOD OF FIFTEEN DAYS THEREAFTER, EITHER OF TREATING THIS CONTRACT AS BREACHED OR OF CONTINUING THIS CONTRACT FOR A PERIOD NOT TO EXCEED THREE MONTHS, IN WHICH LATTER EVENT YOU AGREE TO MANUFACTURE WITHIN THIS PERIOD THE REMAINING QUANTITY OF THE MATERIAL NOT SO MANUFACTURED. IN THE EVENT THAT SHIPPING INSTRUCTIONS HAVE NOT BEEN ISSUED FOR SUCH MATERIAL WITHIN THE THREE MONTHS' PERIOD, YOU WILL, AT THE EXPIRATION OF SUCH THREE MONTHS, INVOICE US FOR SUCH MATERIAL.

MM-6 IT IS AGREED THAT TITLE TO THE MATERIAL COVERED BY THIS CONTRACT SHALL REST IN US AS AND WHEN IT IS INVOICED BY YOU TO US IN ACCORDANCE WITH THE TERMS HEREOF.

MM-7 IT IS AGREED THAT ALL MATERIAL INVOICED TO US AND CARRIED BY YOU AS OUR PROPERTY WILL BE PROPERLY STORED BY YOU AND SHIPPED AS SPECIFIED BY OUR ORDERS WITHOUT FURTHER CHARGE TO US, PROVIDED SUCH SHIPPING INSTRUCTIONS ARE GIVEN WITHIN A PERIOD OF SIX MONTHS AFTER THE EXPIRATION DATE OF THIS CONTRACT. IT IS UNDERSTOOD THAT THE STORAGE OF THIS MATERIAL DOES NOT OBLIGATE YOU TO PAY FOR ANY INSURANCE OR TAXES ON THE SAME.

MM-8 IT IS AGREED THAT UPON OUR REQUEST YOU WILL PLAINLY MARK SUCH STOCK OF MATERIAL SO INVOICED AS BEING OUR PROPERTY AND WILL EXECUTE AND DELIVER A BILL OF SALE IN FORM ACCEPTABLE TO US TOGETHER WITH SATISFACTORY EVIDENCE THAT THE MATERIAL IS FREE FROM ALL LIENS, CHARGES OR INCUMBRANCES.

MM-9 DELIVERY AS ORDERED, BILL AS SHIPPED, EXCEPT AS OTHERWISE HEREIN PROVIDED.

MM-10 YOU AGREE TO SHIP ONLY INSPECTED MATERIAL ON ALL ORDERS PLACED WITH YOU APPLYING ON THIS CONTRACT UNLESS SPECIFICALLY AUTHORIZED TO THE CONTRARY BY OUR ENGINEERING INSPECTION DEPARTMENT.

(B-187 8-34)

(CONTINUED)

<p>A. L. GALT, VICE-PRESIDENT W. F. BANCKER, GENERAL PURCHASING AGENT, NEW YORK</p>	<p>Western Electric Company INCORPORATED TELEPHONE AND TELEGRAPH BUILDING 195 BROADWAY NEW YORK</p>	<p>GENERAL CONTRACT NO. SHEETS SHEET NO. DATE</p>
---	--	---

THIS IS NOT
A SHIPPING ORDER

RD-1 IT IS AGREED THAT YOU WILL MAINTAIN AT ALL TIMES DURING THE TERM OF THIS CONTRACT, A STOCK OF INSPECTED MATERIAL IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

RD-2 IF SAID STOCK IS MAINTAINED AS HEREIN PROVIDED IT IS AGREED THAT YOU WILL INVOICE US THIRTY DAYS AFTER EXPIRATION OF THIS CONTRACT FOR SUCH STOCK FOR WHICH WE HAVE NOT THEN ISSUED SHIPPING INSTRUCTIONS.

RD-3 IT IS AGREED THAT TITLE TO THIS MATERIAL COVERED BY THIS CONTRACT SHALL VEST IN US AS AND WHEN IT IS INVOICED BY YOU TO US IN ACCORDANCE WITH THE TERMS HEREOF.

RD-4 IT IS AGREED THAT ALL MATERIAL INVOICED TO US AND CARRIED BY YOU AS OUR PROPERTY WILL BE PROPERLY STORED BY YOU AND SHIPPED AS SPECIFIED BY OUR ORDERS WITHOUT FURTHER CHARGE TO US, PROVIDED SUCH SHIPPING INSTRUCTIONS ARE GIVEN WITHIN A PERIOD OF SIX MONTHS AFTER DATE OF YOUR INVOICE. IT IS UNDERSTOOD THAT THE STORAGE OF THIS MATERIAL DOES NOT OBLIGATE YOU TO PAY FOR ANY INSURANCE OR TARES ON THE SAME.

RD-5 IT IS AGREED THAT UPON OUR REQUEST YOU WILL PLAINLY MARK SUCH STOCK OF MATERIAL SO INVOICED AS BEING OUR PROPERTY AND WILL EXECUTE AND DELIVER A BILL OF SALE IN FORM ACCEPTABLE TO US TOGETHER WITH SATISFACTORY EVIDENCE THAT THE MATERIAL IS FREE FROM ALL LIENS, CHARGES OR INCUMBRANCES.

RD-6 DELIVERY AS ORDERED, BILL AS SHIPPED, EXCEPT AS OTHERWISE HEREIN PROVIDED.

RD-7 YOU AGREE TO SHIP ONLY INSPECTED MATERIAL ON ALL ORDERS PLACED WITH YOU APPLYING ON THIS CONTRACT UNLESS SPECIFICALLY AUTHORIZED TO THE CONTRARY BY OUR ENGINEERING INSPECTION DEPARTMENT.

(8-190 3-24) (CONTINUED)

FIGURE No. 56.—This sheet is substituted for Fig. No. 52 when no guarantee is given to take any definite quantity. It covers requirements only.

A. L. SALT,
VICE PRESIDENT
W. F. SANCER,
GENERAL PURCHASING AGENT
NEW YORK

Western Electric Company, INC.

TELEPHONE DEPARTMENT

RENDER INVOICES IN DUPLICATE TO ABOVE ADDRESS. SEND TRIPPLICATE
COPY TO TELEPHONE SUPPLIES SERVICE DIVISION
100 BROADWAY, NEW YORK, N. Y.

DATE

SHIP TO

PURCHASE ORDER NUMBER

CUSTOMER'S NUMBERS

SHOW THESE NUMBERS ON ALL PACKAGES

SHIP

QUANTITY

IMPORTANT
RENDER ALL INVOICES
AS SHOWN ABOVE

PLEASE FURNISH THIS COMPANY WITH MATERIAL SPECIFIED
HEREUNDER IN ACCORDANCE WITH "CONDITIONS OF PUR-
CHASE AND SPECIAL INSTRUCTIONS" SHOWN BELOW.

DISCARD CUSTOMER'S CLASSIFICATION ACCOUNTS SHOWN HERE

IMPORTANT
SHOW PURCHASE ORDER AND
CUSTOMER'S NUMBERS ON
ALL INVOICES, BILLS OF
LADING AND SHIPPING
PAPERS.

SPECIAL INSTRUCTIONS

SHIP ON OR BEFORE

SHIP ON

NOT BEFORE

Enclose our packing slip with each shipment. Render invoices within 24 hours after shipment, otherwise mail shipping notice to us promptly and show thereon, all order numbers, through routing and weight.
Include prepaid charges on invoice for merchandise when sold f. o. b. point of origin and shipped prepaid as instructed on our order, and attach to the respective invoices receipted freight bill, or copy of bill of lading with amount of prepaid charges shown thereon.

CONDITIONS OF PURCHASE

Bills will be paid on the 20th of the second month following date of the invoice, unless otherwise agreed.
No charges allowed for packing or cartage.
By accepting this order you hereby warrant that the merchandise to be furnished hereunder will be in full conformity with the specification, drawing or sample and agree that this warranty shall survive acceptance of the merchandise and that you will bear the cost of inspecting merchandise rejected.
By accepting this order you hereby guarantee and agree that the merchandise to be furnished hereunder will not infringe any valid patent or trade mark, and that you will, at your own expense defend any and all actions or suits charging such infringement and will save us, our customers and those for whom we may act as agent in the purchase of said merchandise, harmless in case of any such infringement.

T 271 GNA-1 (1-24)

BUYER

FIGURE No. 57.— Form of order issued by the Western Electric Company applying on contracts described in this chapter.

CHAPTER XI

INVOICES AND METHODS OF HANDLING

General Considerations

THE work in connection with invoices ranks with the most important operations of the department. The order may have been placed to the very best advantage as regards quality, price, delivery, and terms, but all of these benefits may be lost if the invoices are not dealt with in such a manner as to insure their being permanently secured. This is done by careful and prompt checking. Careless checking might mean that prices were approved in excess of those stated on the order, and delay in handling the invoice might cause the loss of cash discount, and in addition the loss of indirect and contingent advantages which accrue from the prompt approval and payment of invoices.

It is the custom of some offices to insist on the use of uniform invoice forms. These are sent out with the purchase order, and the order itself contains a clause to the effect that they must be used when invoices are rendered. It is a proceeding which has been much criticized, and great difficulty has been experienced in getting it adopted. All the advantages of such a scheme are on the side of the buyer. To the vendor it is a source of trouble and annoyance and interferes with his accounting methods. To a limited extent all business houses get a certain amount

of advertising from their stationery and are recognized impersonally from it. There is no individuality for the vendor in the uniform invoice, and unless it can be brought into universal use it will be very unpopular with some houses.

To any person unaccustomed to the handling and paying of invoices it might seem inconceivable that any large establishment with an up-to-date accounting system could pay an invoice twice. Yet this is an occurrence of more or less frequency with both large and small businesses, and will probably never be entirely overcome while the human element is a factor in dealing with the invoices. If the method outlined here is followed, it should be impossible for duplicate invoices or invoices covering the same material to be approved twice. If it was just a question of duplicate invoices, that is invoices bearing same date, for the same material and the same amount, the matter would be simplified because these are more easily detected. But there are other complications, such as two invoices being rendered for the same material but inadvertently bearing different dates; also where, say a party has an order for 120 articles with instructions to ship twenty by express and balance by freight. The twenty are supplied and invoice mailed, the balance of 100 may be shipped by freight the same or next day and another invoice rendered, this time for the full quantity of 120. There are several other ways in which invoices can be made out improperly but inadvertently and containing charges for material and supplies, not actually shipped. But these illustrations will suffice to show that it is entirely the province of the purchasing department to prevent

approval of them, for if they once get through there they will probably be paid. An accounting department vouching many thousands of invoices each month will look to the purchasing department for protection against such errors as cited, therefore, the safeguards must be foolproof. In small offices where proper precautions are not taken invoices frequently get through and duplicate payments are made. Handling the smaller quantity makes no difference in this respect for the bookkeeper receives the invoices daily and probably posts them in his ledger without considering the order of date. At the end of the month he may make out a pay statement of the invoices for which check is to be sent and does not perceive that he has two similar amounts of the same date.

Many purchasing offices do not keep a register of invoices as it is looked upon as an unnecessary addition to the work with no compensating advantages. In some cases, however, it is indispensable, particularly where invoices have to be sent out of the office to some other department for approval. If a record is not made and the invoice cannot be traced, it may be side-tracked and payment delayed. The seller is entitled to his money in accordance with the terms of the contract, and the purchasing department must do its part in the routine work by passing his invoice promptly. Where a cash discount has been arranged, it is important to see that the invoice is passed through for payment before the expiration of the time the discount is available. Where the purchases are large and are of a nature in which cash discounts are customary or have been agreed upon, it is very expedient that the fullest advantage should be taken

of the arrangement and the economic benefits secured. During the course of a year the amount saved by discounting invoices will be considerable, in addition to which it adds to the reputation of the concern and puts more power into the purchasing agent's hands when buying. Any business house will give preference to and favor relations with buyers from whom prompt settlements can be positively relied upon.

In some cases it is the practice for the accountants to receive the invoices and check them against material received and in all other respects, with the exception of price, which is checked in the purchasing department. It is a matter of the most suitable arrangement for the smooth and economical operation of the whole establishment, but it certainly should be up to the man who buys the material to certify that the price is correct and the quality right. Whatever course the invoices take in passing through the various stages of certification, these two things distinctly belong to the purchasing department. It is the opinion of many that the department should be made entirely responsible for the invoice up to the last stage when it is vouched for payment. This, however, is not feasible in large establishments where the ramifications of the work of the accounting department cover the bookkeeping functions of stores and production costs with which invoices are closely allied or inter-related.

Recording Invoices

In every case, irrespective of the nature or magnitude of the business, the invoice should go in the first place to the purchasing department and a record

INVOICE RECORD

SHEET No. _____

NAME OF FIRM _____

DATE	AMOUNT	RECEIVED	SENT TO DEPT No.	DATE SENT	DATE RETURNED	SENT TO ACCOUNTANT	DATE	AMOUNT	RECEIVED	SENT TO DEPT No.	DATE SENT
.....
.....
.....
.....

FIGURE No. 60.—Invoice Record. Loose leaf ledger form with margin on left for binding.

be made of it on some method similar to that shown in Figure 60. This is a loose leaf ledger arrangement, and the pages can be as wide as occasion demands, repeating the ruling as necessary. When the invoices are listed in this record, a watch should be kept to detect duplicates, and if any are discovered bearing the same date and for the same amount, an investigation should be made, for this is the first test the invoice passes through and improper or irregular ones should be immediately suppressed.

Preliminary Work

After recording the invoice the first thing necessary is to scrutinize the date when payment will be due to secure the cash discount and an effective method adopted of keeping this date prominently before all persons with whom the invoice comes in contact. It is customary in some offices to paste a small sticker, similar to Figure 61, on the invoice, calling attention to the date the invoice must be paid to make the dis-

DISCOUNT EXPIRES

DATE

FIGURE No. 61.—Attachment for invoices to indicate date on which discount expires. Size about 2x2 inches.

count available. This should be preferably a striking color which can be readily seen, and serves to call the attention of everybody who handles the invoice to the fact that it must be through by the specified date.

It is also necessary to adopt some uniform method of providing space for certifying the invoice. If there was room on the face of every invoice a rubber stamp would answer the purpose, but this can be done only with a limited number. In small offices the practice

DATE

FROM

PURCHASE ORDER NO.	QUANTITY	DESCRIPTION OF MATERIAL
.....
.....
.....
.....

QUANTITY_____	EXTENSIONS_____
QUALITY_____	F.O.B._____
PRICE_____	FREIGHT_____

CLASSIFICATION	AMOUNT
.....
.....

APPROVED_____

FIGURE No. 63.—A form similar to this can be attached to each invoice to insure proper certification. No invoice should be vouched for payment until this form has been properly initialed in each space by the persons checking invoice. Size about 5x5 inches.

of rubber stamping the invoices on the back is resorted to and answers admirably, but in large establishments this is not feasible. It is impracticable to turn every invoice over to examine its many certifications, and when they are in voucher form the auditors must be able to get at these features clearly and quickly.

A form is shown, Figure 63, which can be pasted along one edge and affixed to the invoice without obliterating any part of it. Sufficient information is written on this to identify it completely with the invoice, and spaces can be arranged on it for all the signatures required by the auditing system of the company.

A much smaller form can be used, similar to Figure 64, and this may answer the purpose of some small accounting systems. It has one great objection in that it is not positively identified with the invoice. One of these forms could be detached from an invoice

INVOICE CHECKED	
FOR	BY
GOODS REC'D
QUALITY
PRICE
EXTENSIONS
CHARGE TO
APPROVED

FIGURE No. 64.—An alternate to Figure No. 63 to be used in checking and approving invoices. Size about 2x3 inches.

for 50 cents and attached to one for \$1000 without detection. As a measure of protection, where invoices are handled by several people, no claims can be made for it and it should only be used where the clerical work on it is done by one man.

Checking Invoices With Order

In all properly organized systems the checking of invoices follows a well-defined and consistent course, which should be well planned, avoiding laboriousness and undue delays. The invoice should be checked against the order to see whether it corresponds with the price and terms stated, and should be recorded on the order itself. This procedure should entirely eliminate any possibility of the material or any part of it being paid for twice. If the instance already quoted is taken, of an order which was placed for 120 articles, twenty to be shipped by express and 100 by freight, it will readily be seen that when the invoice for 120 articles came in and the clerk went to record it on the copy of the order he would find that an invoice for twenty had already been passed and immediately detect the error.

This method of entering invoices on the copy of the order itself is a check against overshipments. An order may be placed for 5000 pieces of goods or articles which are to be shipped in comparatively small lots, and unless a record is kept the supplier might continue shipping indefinitely if it suited his purpose long after the 5000 were actually delivered.

Figure 65 shows a scheme for ruling the reverse side of the copy of order kept in the office and an entry of all shipments and all invoices should be

should be seen that the description corresponds, that the size and weight are correct, also the quality specified. In cases where the material is subject to inspection before delivery the inspection reports must be referred to, to see if it complies with the specification and has passed a satisfactory test. There are various forms of inspection reports and some of them may come from one of the firms of inspecting engineers engaged for the work. If the reports are made by men in the employ of the establishment a form similar to Figure 66 can be used. When completely checked with the order a distinctive check

	JOHN DOE & COMPANY	COPIES TO
INSPECTION	360 CANNON ST.	_____
REPORT	NEW YORK CITY	_____

MATERIAL_____		
PURCHASED FROM_____		
INSPECTED BY_____AT_____		
DATE INSPECTED_____DATE REPORT SENT IN_____		
REPORT APPROVED BY_____DATE OF APPROVAL_____		

NATURE OF INSPECTION AND TESTS		

FIGURE No. 66.— Inspection report. If the original does not go to the purchasing department a copy should always be sent there.

mark should be made on the invoice to show it has been done.

Checking Invoices With Material Received

The checking of invoice with material received is the third preventive against approving invoices twice for the same material, and should be just as sure in its operation as the check against the order. There is always some method of recording the receipt of material and Figure 67 shows a sheet which can be used by the receiving clerk, storekeeper, or whoever receives the material and makes the record. It can be seen that when an invoice is checked with the material received and initialed by the person doing so, it should be impossible for this operation to be repeated for the same material. This form, Figure 67, is a duplicate of the one kept by the storekeeper with the exception of the last column. The copy going to purchasing or accounting department is arranged for checking invoices, and the storekeeper's copy for his perpetual inventory record. In some establishments the receiving clerk or storekeeper has to sign the invoice, but it involves additional traveling around for the invoice and loss of time. Invoices seem peculiarly liable to get lost and mislaid, and the elimination of any possibilities in this direction is desirable.

In some establishments the purchasing department has nothing to do with checking the invoice with material received, this work being done in the accountant's office. The organization of the work of the various departments should govern this. If the stores are entirely separate from the purchasing, it would probably be done in this way.

MATERIAL RECEIVED SHEET							SHEET No. _____	
							DATE _____	
PURCHASE ORDER No.	RECEIVED FROM	Via	QUANTITY	DESCRIPTION	SIZE	WEIGHT	REC'D BY	CHECKED WITH INVOICE
.....
.....
.....

FIGURE No. 67.—Loose leaf sheet for listing receipt of material. This is arranged for use in purchasing office. The last column should contain the initials of the person checking the invoice with material received. Size 11 inches wide, depth to suit.

Compare with Purchase Order No.....	
Prices, Terms & Details Checked & Approved.	
Date	PURCHASING AGENT
Extensions and Totals checked for accuracy and discount.	
Date	VOUCHER CLERK
Approved for discounting before arrival of goods.	
Date	AUDITOR
Receipt of goods against invoice checked and approved.	
Date	AUDITOR

FIGURE No. 68.—Form used by the Richmond Radiator Company for attaching to invoices for the purpose of certification.

FORM A-19		RECEIVING MEMORANDUM		N. M. CO.
RECEIVED FROM _____		DATE _____		
PURCHASE ORDER No. _____		PURCH. REQ. No. _____ INVOICE No. _____ INVOICE DATE _____		
VIA _____		CAR No. _____ PRO. No. _____ TRANSP. CHGS. _____		
DELIVERED BY _____		PKG. SLIP—YES—NO EXTRA CHGS. _____		

QUANTITY		DESCRIPTION OF MATERIAL	REMARKS
UNITS	WEIGHT		

CHECKED BY _____	SIGNED _____
------------------	--------------

RECEIVING CLERK

FIGURE No. 69.—Form of receiving memorandum used by the Neptune Meter Company.

A scheme adopted with success in some plants is for the receiving clerk to list the articles or material received on the reverse side of his copy of the order which is ruled specially for that purpose. This is then attached to the invoice and serves the same purpose as the form shown in Figure 63. This method has one great drawback which is that orders having many shipments and invoices rendered against them must have supplementary forms for approval of all invoices before the final one to which copy of order is attached.

Checking Prices

There are always some orders sent out on which the price is not quoted, and the invoices received against these must be carefully checked to see that price charged is correct. The order may have been a confirming one to cover an emergency purchase and no price arranged. It must be examined therefore and if the price charged is not a fair one it should be taken up with the suppliers. In doing this and in going through the invoices for errors in prices, changes in list or net prices, also in discounts, must be noted and recorded on the price cards.

Emergency orders are probably issued by every purchasing department. This is done by telephone or letter and sometimes the official order is not mailed until a price has been fixed. This is to enable the price to appear on every order, but it is doubtful whether any better prices are obtained than those secured by a good man checking the prices on invoices rendered against such emergency orders. There are some establishments where the character of the business

necessitates the issuance of a large number of these orders daily, and the holding back of the regular official order until a price were arranged would lead to endless confusion.

Checking Freight Charges

If there are any freight charges or freight allowances in connection with the invoice, the traffic man must check and approve these. It is quite customary for the shipper to sell his product f.o.b. the shipping point, but with freight allowed to a competitive point or to destination. These charges are sometimes paid

NOTICE OF FREIGHT CHARGES PAID

There has been paid by _____
 \$ _____ For freight charges on _____
 Shipped by _____
 From _____ Car Nos. _____
 Purchase Order No. _____ Reads F. O. B. _____
 This freight should be charged back to shippers.
 Date _____

FIGURE No. 70.—Notice regarding freight charges. Size 5x8 inches.

by consignee, and in other cases an allowance is made on the invoice. If the consignee's factory is located, or material received, at some distance from head office, an advice should be sent to the purchasing office of any freight paid to enable the traffic man to check it and see that the proper credit is obtained. Figure 70 indicates a form of advice to accountant regarding

this. If the invoice has already gone through there should have been a notation on it about the freight allowance, and this advice will be a confirmation of it. Express charges are another thing which should be closely watched. When delay has occurred in making shipment and urgent calls are sent for the material, a shipper will frequently send it by express, but omit to pay charges. If the delay is the fault of the consignor he should be debited with the charges, or the difference between freight and express charges.

Checking Extensions

The checking of extensions is done more often by the accounting office than by the purchasing department, and when it falls to the latter to take care of it the work must be designated to some person who is familiar with trade discounts as these appear very frequently.

Classification

The classification of an invoice or the allocating of the amount among several accounts will also probably be done by accountants, but if done in the purchasing office it must be seen that it appears on the slip in the space shown in Figure 63 or Figure 64, whichever is used.

Approval

The approval of the invoice as far as it concerns the purchasing department may be covered by the various checks it has already had, each of which will have been initialed by the clerk who handled it at the time. The final approval required by the auditor will prob-

ably be the accountant's to certify that the proper charges or credits have been made to the factory accounts. Its final exit from the purchasing department should be recorded on the form on which it was first entered (see Figure 60).

CHAPTER XII

OPERATION OF STORES

General Remarks

THE operation of the storeroom may or may not come under the jurisdiction of the purchasing agent, but whether it does or not, the receipt and control of raw material and supplies are so closely allied to the purchasing department, that some description of the duties pertaining to the work and the course taken by the material until its final consumption or disposition is necessary to complete the object of this book.

If the purchasing agent is held responsible for purchases to keep a manufacturing plant running, it does not seem right that he should have no voice in the maintenance of stock, and, in conjunction with the heads of departments interested, a voice in determining the maximum and minimum quantities kept on hand. For on the latter depends quite often the price to be paid.

There are always losses in producing anything in each stage of its development. There is a loss in the labor item from "soldiering" or some other cause, and there is a loss in material from waste, pilfering, etc. It is the mission of the stores department to prevent this. A loosely kept storeroom without a proper system, is one of the most fruitful causes of losses, but it can be eradicated altogether, or reduced to an

imperceptible minimum by the receipt, control, and delivery of all material used through a well organized and systematized stores system. There are four points to consider:

1. The receipt of materials and supplies into stores and their accurate recording.
2. The storing in convenient and safe places and receptacles.
3. The delivering of the right materials to the right persons.
4. The keeping of an account of the stores in an accurate and efficient manner.

Receiving Materials and Supplies

In some establishments the storekeeper receives all materials, but in the larger ones there will be a receiving clerk, whose duties will be to receive and receipt for all articles coming into the establishment and deliver them to the stores and sometimes directly to the department.

He should not receive anything unless he has a copy of the purchasing agent's order, which he should refer to and compare with the arriving material. If this is not done he is liable to receive goods not ordered, or which have been canceled, thereby getting the purchasing department in trouble and probably causing loss to the establishment. Quantities in excess of those ordered should never be received without consulting with the purchasing agent.

The receiving clerk will probably report directly to the accounting department, sending copies of his lists of materials and supplies received to the purchasing agent and storekeeper. Whether the store-

MATERIAL RECEIVED INTO STORES							SHEET No. _____	
							DATE _____	
PURCHASE ORDER No.	RECEIVED FROM	VIA	QUANTITY	DESCRIPTION	SIZE	WEIGHT	REC'D BY	ENT'D PERP'L INVEN'Y
.....
.....
.....
.....

FIGURE No. 73.—Material received sheet. The last column on this sheet is used for initialing the item when entry is made on perpetual inventory. In other respects it is similar to form shown in Figure No. 67 with which it should register.

keeper received the material or not when it first arrived into the establishment, he has to receive it into the storeroom with proper checks and records.

If reference is made to the forms shown in Figures 67, 73, and 74 a clear understanding can be had of the method outlined for recording receipt of material. All three of these forms are not always necessary, but two of them must be used whether there is a receiving clerk in the establishment or not. The storekeeper must have one list to enable him to enter the material on his perpetual inventory and another list must go to the purchasing or accountant's office for the purpose of checking invoice.

Figure 73 illustrates a method of listing the material. This is arranged in a similar manner to the copy sent to the purchasing agent, Figure 67, the only difference being in the last column. This is used by the storekeeper when making his entry on the perpetual inventory, whereas in the purchasing department the duplicate form, Figure 67, is used when checking invoice with material received. This sheet represents to the storekeeper what the journal does to the bookkeeper, and he debits each account on his perpetual inventory, which is his ledger, with each item on the receiving sheet.

The copy of the report of materials received into stores which goes to accountant's office will probably need a column for inserting the value of the goods, as shown in Figure 74. If three copies are made, they should register with each other, the only difference being in the last column. This difference is caused by the fact that the storekeeper is mainly interested in quantities, whereas the accountant's interest is prin-

cipally in values. This is the chief distinction in the results accomplished by their bookkeeping.

Having checked the material with copy of purchasing agent's order, any mistakes on the part of the shipper as to quantity and size can be detected. Should the shipper have exceeded the number of articles or weight ordered, this will also be discovered. If it is decided to return the excess quantity or wrong sizes, this can be done much more conveniently before the material is placed in storage bins than afterward. In large plants there will probably be an inspector to examine materials, but in many cases the storekeeper himself will examine material on arrival and determine, as far as such an examination can do so, whether or not it conforms to the description and specification on order.

If the material is to be subjected to tests, samples must be sent to the laboratory which is maintained in the plant, or to one outside. These samples must be so marked or separated that identification is positive with the shipment they were taken from.

Any questions which arise regarding freight on goods in or out of the establishment must be taken up with the man in charge of traffic, or reported to him.

It will be appreciated from this brief description that the man in charge of receiving goods fills a responsible position in connection with the orders placed by the purchasing department. Among his duties will be the receipt of goods returned from customers, and he should have specific instructions whether to accept or refuse these.

After the material has been received and properly counted, weighed, and measured, there may be some

articles which are sent directly to the departments instead of to the stores with copy of receiving slip, which should be signed and returned to the stores. The entry is made on the stores record exactly as if the material went into and was delivered out of the stores. This keeps the cost accounting department straight.

Another method of reporting receipt of goods, although not generally considered as good as that outlined, is to report each arrival separately and, instead of making a daily list of materials as already indicated by Figure 73, to make out a slip for each shipment as it comes in, somewhat on the lines shown in Figure 75. A copy of this should go to the storekeeper, a copy to purchasing agent, and another to cost department. The last named will require to know destination of material, in order to charge it to proper account.

Another scheme adopted by some is for the copy of the purchasing agent's order to be signed by the receiving clerk as a notification of receipt of material, making out no receiving slip. This has many objectionable features, however, and it would be only in most exceptional circumstances where it would answer satisfactorily. A method in which the copy of purchasing agent's order is used to report receipt of material is shown in Chapter XIV. Wide experience led to its adoption in this case.

It is important that the material-received sheets, or receiving slips should be numbered, as they are liable to get lost or mislaid, and any break in the sequence would at once call the attention of the purchasing or cost department to the fact.

RECEIVING REPORT					DATE
Articles listed below have been received today					
QUANTITY	SIZE OR WEIGHT	DESCRIPTION	FROM	ORDER No.	CONDITION
REMARKS					
Receiving Clerk					

FIGURE No. 75.—A form for reporting the receipt of each arrival of goods. Size about 6 x 7 inches.

Form 177 1014

Consolidated Gas Company of New York

PURCHASING DEPARTMENT

130 East 15th Street,
New York City

RECEIVING DEPARTMENT
Extra Copy

PUT THIS ORDER
No. 42823
ON YOUR INVOICE
AND ALL PACKAGES

DELIVER AT

DEPT.

Subject to conditions endorsed hereon.

Req. No.	Quantity	Description of Material

U. S. PAT. NO. 1,000,000 JAN. 15, 1918

The above material is to be inspected immediately upon receipt, and Purchasing Department notified at once if it does not conform in every respect to that ordered.
Compare the above order with your requisition and if it does not meet with your requirements notify the Purchasing Department immediately.

FIGURE No. 77. — This copy of the order of Consolidated Gas Company is sent to Receiving Department to check receipt of material.

RECEIVING DEPARTMENT REPORT

TRANSPORTATION COMPANY	
DATE RECEIVED	PRO NO.
WEIGHT OF EACH ITEM	TRANSPORTATION CHARGES ON EACH ITEM
TOTAL	
WITH OTHER GOODS REPORTED ON	
ORDER NO.	AMOUNT
TOTAL AMOUNT	
TRANSPORTATION	
CO.'S BILL	
SIGNED BY:	
RECEIVING CLERK	

271 QN-8
(8-18)

FIGURE No. 78.—Report made by the Receiving Department of Western Electric Company. This is also a copy of the order and bears same number.

FROM *Western Electric Company.*
 INCORPORATED
 195 BROADWAY
 NEW YORK

ORDER NUMBER

DATE

SHIPMENT TO

INSPECTION
 COPY

☒ SUPPLIER:—PLEASE HAND THIS COPY TO
 WESTERN ELECTRIC COMPANY'S INSPECTOR
 WHEN PRESENTING MATERIAL FOR INSPECTION

371 GN-E
 (8-23)

FIGURE No. 79.— This is the form used by the Western Electric Company for reporting inspection. It is written up at same time as order and bears same number.

Received at Stockroom		192
From		
Quantity	Article	Order
		Req.
		Car
		Express
Remarks		
Rec'd by		
Form 363-2500-7-8-24		

FIGURE No. 80.—Form used by Nichols Copper Company for reporting receipt of material. Size 5 x 8 inches. One copy of this goes to the Purchasing Department for checking with invoice.

The Proper Storage of Materials and Supplies

The proper storage of materials and supplies is of equal importance to receiving and delivering them. When adequate provision has been made for receiving goods, examining them, reporting poor quality or deficiencies, there is the problem of storing them for varying periods. There are several things to be considered. One hundred dollars in the cash drawer would be locked up; there may be one hundred dollars' worth of copper bars in the stores which should be just as secure from theft, or one hundred dollars' worth of rubber which must not be allowed to deteriorate.

The stores, therefore, should not be entered by any unauthorized person and proper receptacles should be provided for all material. It is not possible to give a description that would fit the needs of every business, but generally the stores must be equipped with racks, shelves, bins, drawers, and boxes to suit the nature of the materials.

Some considerations are common to any stores; for instance, material which is constantly called for should be within easy reach, and heavy material should be at a convenient height for loading onto a truck. The alleyways should not be too narrow, as the racks darken them, and insufficient space makes it awkward to get material out promptly. Some shelves and racks are built narrower at top than at bottom which is an excellent scheme for some stores, giving more light and elbow room with no loss in storage capacity.

A scheme which has been adopted by some and may

commend itself to others, is to have duplicate bins or bins extending through from one aisle to the next, the object being to place new material in one side and take the old out from the other side. This is to prevent an accumulation of old stock. Not all establishments can afford the room for this, but it has its advantages, particularly with stores which are liable to deteriorate with age.

In large plants it will probably be necessary to have several storerooms located near departments where material will be used. This may entail some duplication of stores, but will be fully compensated for by the saving in men's time in obtaining stores. Some material can be stored outside, including such things as heavy castings, lumber, fuel, etc., but all should go on store records.

REQUISITION ON STOREKEEPER

This Requisition will not be accepted if order No. is not given, if it is not signed by foreman, or if material is to be charged to more than one order.

ORDER No.	QUANTITY	DESCRIPTION	SIZE OR PATTERN No.

DATE_____

SIGNED_____

Foreman

FIGURE No. 81.—Requisition on storekeeper. Size about 4x6 inches in duplicate.

Deliveries from Stores

Not less important than the receiving and storing is the delivering of stores. There must be a properly authorized list of foremen or others who are empowered to sign requisitions for withdrawing material or supplies from storeroom. Irresponsible persons should never be given the power, and if the material is small in bulk and high in intrinsic value the foreman's honesty should be dependable. Even then, and with precautionary measures instituted in the shop, some losses will occur from pilfering. There will also always be some losses through waste, but with close watching and safeguarding it can be reduced to the smallest dimensions.

There are two methods of obtaining goods from

DATE	REQUISITION For Material or Supplies	ORDER No.
QUANTITY	DESCRIPTION	SIZE OR SYMBOL No.
Dep't No. _____	Foreman _____	
Delivered To _____	Delivered By _____	

FIGURE No. 82.— Requisition on storekeeper. An alternate to figure No. 81.

stores, the one principally in vogue being carried through by the foreman making out and signing a requisition for what he needs for the product his men are engaged on. Several illustrations of these are given (see Figures 81, 82, and 83). They should state clearly the exact quantity required, with size or other necessary particulars to enable the stock man to deliver material promptly. They should give order number and any details which are essential to the work of the cost department where they will eventually go. They should be in duplicate of contrasting colors, the object of this being that when they arrive in the cost department the originals are easily distinguished from the duplicates. Some cost departments require the requisitions to be ruled with a column for pricing the articles, others do not; this

DATE		REQUISITION For Material or Supplies			ORDER No.	
QUANTITY	DESCRIPTION	SIZE OR SYMBOL	PRICE	VALUE		
Dept. No. _____		Foreman _____				
Delivered To _____		Delivered By _____				

FIGURE No. 83.— Requisition on storekeeper with column for inserting value by the cost accounting department. Same size as Figures No. 81 and No. 82.

The original only is sent to the storeroom, the copy being sent by the foreman, after he has received the material, to the cost department. When the original finally reaches there, they can be checked against each other, preventing falsification on the part of either foreman or storekeeper. The original having been presented at the storeroom, material received and receipted for, it is also sent to the cost department after the necessary clerical work is done in stores. Although not essential, it is advisable to have the

ORDER No. _____ DATE _____

Dep't No. _____	Foreman _____
Delivered By _____	Received By _____

FIGURE No. 84.—Credit requisition for material returned to stores. Same size as Figure No. 81, but a contrasting color.

requisitions numbered, as it facilitates the work of sorting and comparing them on their arrival in the accounting department.

There will be from time to time an excess amount of material withdrawn by foremen, or shop orders may be canceled or curtailed, necessitating the return of some material to the stores. This is effected by the foreman making out a credit requisition, as shown in Figures 84 and 85, the original and duplicate of which he sends with the material, and proper credit is given. The duplicate is signed by the stock man and returned to the foreman, who sends it to the cost department.

Another method of obtaining material from the stores is by means of the material budget. This is used in some factories very satisfactorily, and for certain kinds of production work it answers splendidly.

DATE	CREDIT Material Returned to Stores			ORDER No.
QUANTITY	DESCRIPTION	SIZE OR SYMBOL No.	PRICE	VALUE
Dep't No. _____	Foreman _____			
Delivered By _____	Delivered To _____			

FIGURE No. 85. — Credit requisition for material returned to stores with column for accountant to insert value.

LIST OF MATERIAL REQUIRED FOR

QUANTITY		ARTICLE		ORDER No.		DATE		
ITEM No.	No. of Pieces	MATERIAL	SIZE	RECEIVED BY	ISSUED BY	DATE ISSUED	PRICE	AMOUNT
.....
.....
.....

FIGURE No. 86.—Material budget or list of material. A copy of this is placed in the storekeeper's hands and is used for obtaining material from stores. Size 7 x 7 inches, copies as required.

But for others it has many disadvantages and is not practicable. Where it can be used effectively, it is a better check on material used than the requisition system; it lessens the accounting work, is a better check on loss and waste in the shop, and brings investigation when more material is required than actually specified.

If the factory is engaged in manufacturing some article of which the designer or drafting room can specify, before work on it is started, all the material needed to the minutest detail and make a complete list of it the budget system can be made to work well. Figures 86 and 88 show forms used for making the budget, or list of materials in a number of machines or articles to be manufactured. A copy of this is sent to the storekeeper, and as the material is taken out it is signed for in the space indicated. When all the material is delivered, the bill of material is sent to the cost department. This method simplifies the work of the cost department because the value of the material can be figured out on the material sheet itself in one lump sum and there will not be a lot of small requisitions to deal with. It is a better check on the shop, because if more material is called for there must have been loss or waste, which can then be investigated.

The advantages of this method will be lost if the scheme is not rigidly adhered to, and if it is rigidly followed it will be found arbitrary, inelastic, and slow in any emergency. The material also should be all drawn from stores within a reasonable time; if not, the sheet will be in use in the storekeeper's hands for such a long time as to become illegible or probably lost.

BILL OF MATERIAL

FOR_____

DATE_____

ORDER No. _____

DRAW'G No. _____

DEP'T No. _____

SHEET No. _____

ITEM No.	No. OF PIECES	NAME OF PART	MATERIAL	DRAWING No.	PATTERN No.	RECEIVED BY	ISSUED BY	DATE ISSUED	PRICE	AMOUNT

FIGURE No. 88.—Material budget alternate form to Figure No. 86. Size 8 x 8 inches.

Stores Accounts

It has been explained in what manner the material goes into and out of the stores, and it is absolutely essential that an exact record should be kept of these incomings and outgoings. Theoretically a storekeeper's account should balance as accurately as a cashbook does with the cash on hand, but this is never the case. It is remarkable, however, how closely the records tally with physical counts in well-kept stores. Well arranged and lighted buildings with honest and intelligent help are all conducive towards this end. There is nothing complicated or intricate in stores accounting, but care and accuracy are essential as in every other form of bookkeeping. With these characteristics the work will be found comparatively easy for any man with only a rudimentary knowledge of accounting.

The whole scheme of stores accounting centers around the perpetual inventory (see Figure 89). It is the ledger of the system, carrying accounts with each description of material or supplies kept in stock, with debit and credit columns arranged so that a balance can be readily calculated. The location of the article should be given; this corresponds to the address of a customer in the sales ledger, and the amount of credit he is entitled to is comparable to the maximum stock permitted. The illustration of a perpetual inventory shown in Figure 89 is arranged for recording quantities only, which is all the majority of stores are required to do. Some storekeepers have to record values and quantities, but these are exceptional cases. The cost accounting department

ARTICLE _____		LOCATION		MAX. _____		VERIFIED		SHEET No.			
		SHELF No. _____									
		BIN No. _____		MIN. _____							
ORDERED				RECEIVED				ISSUED			
DATE	ORDER No.	QUANTITY		DATE	ORDER No.	QUANTITY		DATE	Req. No.	QUANTITY	BALANCE
.....
.....
.....
.....

FIGURE No. 89.—Perpetual inventory. The Stores Ledger. Loose Leaf Sheets. Size as required.

usually takes care of the values, but there may be reasons why they should be kept in both departments, in which case the perpetual inventory would have to be arranged accordingly. See Figure 90 for this form.

On receipt of anything into the storeroom, the proper entries must be made on the perpetual inventory. This will be done from material-received reports, credit requisitions for material returned from shop, or any other forms used to indicate receipt of articles. All of these documents, before being posted or entered on the perpetual inventory, will of course have been checked and it must be known that the material is actually in the stores. In this respect they are synonymous with invoices, which would not be accepted as correct and entered in the ledger until checked; similarly the material-received sheets, etc., must be absolutely correct before being entered in the perpetual inventory. If a copy of the material-received report has been sent to the accounting department, the stores copy can be filed away for reference. The memorandums received from the shop with materials to be credited must be sent to the accountants to enable them to check with copies received from foremen, and make the proper credits to production orders.

Nothing should be permitted to leave the stores without a voucher to show for it. These consist of the requisitions, which must be entered on the perpetual inventory and promptly sent to the accountant's department. It is absolutely essential that these entries of articles, both into and out of stores, are correctly and accurately recorded, otherwise the whole object of the scheme will be defeated.

ARTICLE _____		MAXIMUM		VERIFICATION DATES		SHEET No.				
LOCATION _____		MINIMUM								
UNIT _____										
ORDERS PLACED				ISSUED				BALANCE		
DATE	ORDER No.	QUANTITY		DATE	ORDER No.	QUANTITY	WEIGHT	PRICE	AMOUNT	QUANTITY
.....
.....
.....
.....

FIGURE No. 90.—Perpetual inventory or stores ledger arranged to show both quantity and value.

Stock Room		Minimum Available		Description		Used for									
Unit															
PREV YEAR SALES		REQUIREMENTS		BALANCE		ORDERED		RECEIPTS		QUANTITY IN STOCK		DELIVERIES		REMARKS	
DATE	NO.	AMOUNT	DATE	STOCK	ORDR	QUANTITY	MEMO	REQ. NO.	P.A. TO BE	QUANTITY	DATE	REQ. NO.	PRICE	QUANTITY	

this only when a general inventory is taken. How often it should be done depends on the nature of the stock. It is not necessary to verify every item at one time; the stores can be divided into sections, and the work of checking done when it will not disturb the general routine work going on. When there is an opportunity, which comes frequently in almost every storeroom, the help should be set to counting or weighing articles or materials and when verified notification should be made on the perpetual inventory. By this means the whole stores should be covered every two or three months, which will probably be found often enough. No disturbance or dislocation of regular work will occur and anything wrong will be discovered promptly. The storekeeper will have the satisfaction of knowing that his stores and accounts are in good and reliable shape.

Stores Tickler System

In making entries on the perpetual inventory, close watch should be kept of balance to see how near it is to minimum. The stock man taking articles from bins can also watch this and notify the chief storekeeper by means of tickets (see Figures 93 and 94). One is the regular ticket, Figure 93, which is detached from its hook and sent to the storekeeper when minimum is reached. In its place the stock man hangs the temporary ticket, Figure 94, which should be a different color. This remains there until additional articles are received to bring quantity above minimum. The regular ticket is returned by the storekeeper when an order has been placed, and both it and the temporary ticket remain together until goods are received. This

In previous chapters special emphasis has been placed on the desirability of keeping the amount of stores on hand at the minimum. There are important economic reasons for this. To maintain the stores at the minimum and at the same time maintain an ample factor of safety in so far as supplying the requirements of the factory are concerned means that the stores tickler system should provide proper guaranties and safeguards to protect this factor of safety. Therefore it should be rigidly kept up.

In some stores regular bin tickets are not used and a simpler form of tickler ticket can be adopted (see Figures 95 and 96). In this case the minimum will be marked on bin, and when it is reached the stock man sends the first ticket to the chief storekeeper who makes requisition on the purchasing agent and returns

○

BIN No.	
MATERIAL	
Min. reached and ticket sent to storekeeper.	
DATE	
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: right; margin-right: 20px;">Stockman</div>	
Requisition sent to purchasing agent.	
DATE	
<div style="border-bottom: 1px solid black; width: 100%;"></div> <div style="text-align: right; margin-right: 20px;">Storekeeper</div>	

FIGURE No. 95.—Tickler ticket for storeroom bins about 2 x 3 inches.

ticket to the bin. The second ticket is then sent to the chief storekeeper, who retains it until he receives copy of purchase order, when it is returned to bin. The reason for using the second ticket is that it proves a sure check on both storekeeper and purchasing agent. The storekeeper on receipt of first ticket makes a requisition, but if it is mislaid or not acted on by the purchasing agent, the second ticket brings it to his attention. The stock man at the bin would also have his attention drawn to the failure to order a new supply if the second ticket did not come back. These tickets should be in contrasting colors.

Scrap

All scrap should be sent to the storekeeper, who should weigh it and arrange a place in his store-room for such of it as requires to be kept locked up.

○

BIN No. _____

MATERIAL _____

Requisition notice received.

Stockman

Order placed by purchasing agent.

DATE _____

Storekeeper

FIGURE No. 96.—Tickler ticket for stock room bins. Same size as No. 95, but different color.

lowest point consistent with safety, and to do this a study must be made of the rate of consumption, probable future rate, and estimated time required for delivery.

If there is no material budget, the storekeeper will probably receive copies of production orders, which he can check with stock he has on hand, as he should know the quantities of material needed for these orders, and will then be able to requisition what is

DATE_____

TO THE PURCHASING AGENT,

There has been received into Storeroom_____ of_____ Scrap. The total quantity now on hand awaiting your instructions for disposal is_____

Storekeeper.

FIGURE No. 98.—Report from storekeeper to purchasing agent that scrap has been received. Size 4 x 6 inches.

required to execute the orders as they progress through the shop.

Before leaving the stores question another word or two about maximum and minimum is not out of place. Take the simpler proposition of supplies first. The records kept in the purchasing office will determine the exact quantities used in a given period and any intelligent person can fix the high and low with the above mentioned records as a basis and also taking into consideration the most economical quantities to buy in the matter of price, freight charges, etc.

The maximum and minimum on materials are more

difficult to determine owing to the fluctuations in business and the changes in styles of articles manufactured and methods of fabricating. There are no insuperable difficulties if the sales manager, production manager, and purchasing agent get together.

The first man can estimate approximate sales, the second man can tell what shop changes are likely to take place, and the third man knows what quantities he can buy to most economical advantage. Time is an important factor to be considered. The necessary time to make the sales, to manufacture the articles, and to obtain delivery of raw material. Fix the maximum of raw material low on articles likely to go out of fashion, however attractive a purchase may look. On standard manufactured products with a steady and regular sale the proposition is simple. On other goods sound judgment and common-sense will determine the question. The economic benefits and advantages have been discussed before. Overbuying and underbuying are both very expensive things to indulge in. Steering the right course in any business operation is a most valuable factor and in the function of purchasing it is pre-eminently so.

CHAPTER XIII

LEGAL ASPECTS OF PURCHASING.

General Remarks

IF a tabulation were made of the character of the civil cases which come before our courts for settlement what percentage of them would be directly connected with purchasing? Outside of those cases which appear on the calendars of such courts as the Surrogates, or cases regarding family ties, the percentage would probably be nearly one hundred.

These cases are caused by various circumstances. Laxity in making a contract. Inability to fulfil a contract. Misunderstandings as to the interpretation of a contract. Refusal to fulfil a contract, etc. Therefore the contract is the all important factor and as a contract is made every time a purchase is made it is necessary to know what a contract is.

Definition of a Contract

Webster's Dictionary defines a contract as follows "To covenant, agree, bargain." It has been defined by Blackstone as "An agreement upon consideration to do or not to do a certain thing," and this definition is generally accepted by the legal profession either literally or so paraphrased that the meaning is the same.

In purchasing work the word contract is generally used to designate an agreement between the buyer

and seller the terms of which are set forth in a document signed by both parties. But a contract may be made verbally and is just as binding, if it can be proven, as a written contract. The conditions governing the operations of industrial and mercantile establishments demand that all verbal agreements of importance be reduced to writing, hence the generally used term contract.

A contract is a "meeting of minds," that is, two parties have agreed (their minds have met in agreement) to do a certain thing. When a price is named for an article and it is accepted by the buyer who hands over the consideration and takes delivery, that is in purchasing the most elemental form of contract. Millions of such transactions happen daily. The purchasing agent executes a contract every time he signs an order which is strictly in accordance with the terms of an offer to sell.

The making of a contract is not always a simple thing. It is sometimes very complicated but for the general run of purchasing work it is not difficult to determine whether a contract has been made. It is only necessary to decide whether there has been complete agreement between buyer and seller. So many misconceptions exist as to what constitutes a contract that a few of them will be discussed.

Offers to Sell and to Buy

Quotations received by the purchasing department are usually in response to a request from that department, and the issuing of the order in accordance with that quotation is an acceptance of it and the two constitute the contract. But there are some-

times quotations received which are not definite offers to sell. They are only tentative. If it is the desire of the buyer to make the purchase on the terms outlined he must get the quotations made in the shape of a definite offer to sell and accept it, or he can issue an order in accordance with the tentative offer to sell and obtain an acceptance of his order.

A buyer when negotiating a purchase might so frame a letter that it would convey the meaning that he is making an offer to buy, whereas he may only wish a quotation from the vendor. Communications of this nature if the transaction is important should be carefully worded because a definite offer to buy if accepted by the seller would constitute a contract.

It is important to remember that if an offer is made either by the buyer or seller, it must be accepted exactly as made to complete the contract. Should any modification of any kind be made by either party the contract is not complete until the modifications have been accepted. The essential elements of purchasing contracts therefore are a definite offer to sell or buy and are accepted strictly in accordance with such offer.

Time Limits

If an offer to sell is made subject to acceptance within a specified time such a limitation implies an agreement to sell before the date named. In making contracts involving large amounts the buyer must sometimes ask for such a stipulation to enable him to consult with others before finally closing the contract.

An offer to buy or sell which contains no time limits should be accepted in the same manner in which it was made. If made by ordinary mail it can be accepted through the same channel, but an offer made by wire and neglected for several days and then accepted by mail or even by a telegram would not constitute a legal contract. The essence of this is that, when no time is named within which a formal acceptance must be made, then the offer must be accepted immediately and the acceptance would be considered legal if sent through the same channel as the offer.

Changes in Contract

When a contract has been completed it is assumed that it embodies and conveys the true meaning of the offer and acceptance and it follows, that it is irrevocable except by mutual consent.

It may be found however that certain changes are desirable. In such a case it is necessary to proceed along the same lines as in negotiating for a new contract. That is, there must be an understanding, "a meeting of minds," and the modifications agreed upon can be put into documentary form by drawing up an entirely new contract and the cancellation of the old one. In many cases it is sufficient to follow the procedure by which the contract was originally made. That is, one party can make an offer to modify it and can secure an acceptance from the other party.

Contracts made through Agents

Agents and salesmen are not always clothed with authority to complete a contract and many printed

contract forms have a clause in them to the effect that the contract is not binding until executed by some official of the company. Quite often an agent merely serves to bring the two principals together. If a buyer has concluded a contract with the principal through an agent then any modification of the contract must also be agreed to by the principal. However, if an agent or representative of a company has authority to conclude a contract, then the same agent or representative can also agree to modifications and changes and these are then binding on his principal.

Specifying Quality or Grade

It is an implied condition of an order issued in the usual course of business that the material must be of the kind and description specified. Should they not be then they may be rejected by the buyer. But he has no remedy against the seller, he can only reject the goods tendered.

In buying from a middleman no guarantee of quality is conveyed by the dealer to the buyer unless the middleman gives a distinct understanding to this effect. On the other hand when material is purchased direct from a manufacturer whether or not a guarantee is given there is always an implied warranty for such material as the manufacturer himself produces.

When the conditions surrounding the buyer make it imperative for him to obtain goods of a certain quality, size, or weight, then it is essential that the contract contains a clause guaranteeing this, and provisions for determining the quality, size, or

weight. A definite remedy should also be stipulated in the event of the seller failing to deliver the right kind of goods. With this undertaking accepted by the seller the buyer is entitled to damages.

Date of Delivery

Prompt delivery on a certain agreed date may be a matter of great moment to the buyer. He may suffer serious losses if he does not receive the material on time. A clause should be inserted to the effect that the time of delivery is the essence of the contract. It is sometimes necessary to include a provision to the effect that the seller shall be liable to pay a certain fixed amount for non-delivery usually designated "liquidated damages." It must be shown however that the purchaser has actually sustained a loss. Damages cannot be enforced simply as a punishment.

Place of Delivery

Ownership in property conveyed under contract passes to the buyer at the place of delivery. All orders should specify a delivery point. If there is no express stipulation to the contrary and if there are no circumstances which indicate a different intention, the point of delivery is understood to be the place where the goods are located at the time the order is sent to the seller.

If the purchase is made f. o. b. point of shipment, and the goods are lost or damaged in transit, the buyer must nevertheless pay for them, although he has never had physical possession of them. His only remedy lies in a claim against the transportation company.

Many purchases are made f. o. b. point of shipment freight allowed, but this does not change the delivery point at which possession passes to the buyer.

If no reference is made to the delivery point the general assumption is that the seller has executed his part of the bargain by delivering the goods to a common carrier, unless it can be proved that the universal trade custom is contrary to this practice.

Delivery is supposed to be taken as and when specified. If a buyer instructs the seller to defer delivery for an indefinite or even a fixed time, he is virtually authorizing the seller to store the goods for him. The seller is only required to exercise a reasonable amount of care in connection with goods so held, and any damage to them during this period would be a responsibility of the buyer.

A buyer may refuse to accept goods delivered prior to a specified date and his refusal does not release the seller from his obligation to re-deliver the goods at the time and place specified.

It is customary for a seller to insert a clause in a contract referring to inability to make delivery on a specified date owing to causes beyond his control, such as a strike, either in his own factory or on the transportation company's lines. If such an influence prevents delivery being made for a period of say two months, the buyer cannot compel the seller to accept delivery at the end of that period, neither can the seller force the buyer to deliver. The contract, or such portion of it as specified delivery within the strike period, is at an end.

Orders and Acceptances, and Contracts.

Throughout this discussion an accepted order and a contract have been treated as synonymous, which is true in so far as they represent an agreement between buyer and seller, the difference lies in the written form. Irrespective of this form an agreement reached in accordance with this discussion is a contract. The order is really a "command" from the buyer to the seller to make, ship and deliver certain goods, for which the buyer has received a quotation. It is in fact an acceptance of the quotation. The ease and simplicity of this method makes it universally popular for the majority of transactions. The lengthy written contract is adopted in those cases already alluded to in which the transaction is more intricate and involved and requires an elaboration in documentary form.

Trade Price Lists

These are not specific offers to sell, and an order based on a general trade price list does not constitute a contract. Such price lists are subject to withdrawal, revision or change without notice.

Refusal to Sell

It is not compulsory on a manufacturer or merchant to assign a reason for refusing to sell to any party wishing to buy. There are certain classes of business of a semi-public character which are forbidden by law to discriminate, but outside of those that come under these regulations no control is exercised.

Returnable Packages

In the absence of any agreement to the contrary it is customary for the buyer to deliver empty packages to the seller at the delivery point at which they were originally received from the seller. They should be delivered in good condition within a reasonable time or within the time which may be specified in the contract.

Variation in Quantities

In the manufacture of certain small parts trade usage permits an over-run or under-run of approximately ten per cent. If therefore the buyer must have exactly the number specified it must be so stipulated and agreed to by the seller.

Misleading Statements

If an agent or salesman makes untrue statements in negotiating a contract and secures business by such statements then the order is obtained by fraud and the material may be returned to the seller. They must however be returned within a reasonable time after the fraud is discovered.

Authority of a Purchasing Agent

If a purchasing agent should have private instructions from his principals not to buy beyond a stipulated amount or not to close certain contracts without specific authority from his principals and he should disregard such private instructions his actions cannot be repudiated by his company. It is assumed

by those with whom he is negotiating that he is empowered to purchase the requirements of his company. His private instructions are not supposed to be divulged to a third party and he would apparently be acting within the scope of his authority as it is generally understood.

Accepting and Shipping Portions Only

When several items of merchandise are offered and a separate price named for each, it does not permit the buyer to accept some and reject others. If only a portion is ordered the seller's acceptance must be secured before it can be considered that an agreement has been reached. Many purchasing agents make it a condition in the "Request for quotation," that it is optional to accept whole or part.

An order also must be shipped complete and the buyer is not compelled to accept the material if only a portion is delivered. The order was an offer or acceptance of the whole quantity and to complete the contract it must be accepted and fulfilled intact.

Payment

The date on which goods must be paid for is reckoned from the time the material was delivered at the f. o. b. point. If the delivery point is at destination the date of the invoice should be concurrent with arrival of goods at destination. It is a common practice to date invoices the same day as shipment is made, although actual delivery may not take place for some time afterwards, depending on the time taken in transportation.

CHAPTER XIV

PURCHASING FOR A MANUFACTURING AND CONSTRUCTION COMPANY

IT is intended in this and the following chapters to briefly outline the purchasing routine of three systems. This chapter deals with a large corporation manufacturing elevators, escalators, mine hoisting machinery, etc., with factories located in widely separated parts of the country. The product of these factories finds its way into every civilized country in the world, besides having an enormous domestic demand which is disposed of through offices situated in over eighty of the principal cities.

The business of the undertaking comprehends not only the manufacturing of machines and apparatus, but also the erection of them, and the construction of the appurtenances necessary for their complete installation.

A service department is also maintained which comprises the work of inspection, repair, upkeep, and maintenance of elevators already erected, and the furnishing of necessary supplies. It undertakes the reconstruction of old and partially obsolete installations, to bring them into conformation with the latest developments. The constant additions which are being made to the building laws in cities and the various state requirements governing factory buildings add considerably to the functions of this department.

It can readily be conceived that the purchasing connected with the multitudinous activities of such a concern is a complex problem and one involving an enormous amount of detail. The writer's association

CHARGE TO
ACCOUNT NO.
CLASS

ORIGINAL

OTIS ELEVATOR COMPANY

REQ. NO. _____

DATE _____ 191__

PURCHASING AGENT: PLEASE ISSUE ORDER FOR THE FOLLOWING FOR DELIVERY

TO _____ WORKS DEPARTMENT NO. _____

CHARGING EACH ITEM TO ACCOUNTS INDICATED IN MARGIN

DATE WANTED _____

SHIP VIA _____

TO BE USED FOR _____

MAX. _____ MIN. _____ ORDER _____

FIN. IN STOCK _____ FIN. ON ORDER _____

RGH. IN STOCK _____ RGH. ON ORDER _____

ASSEM. IN STOCK _____ TOTAL AVAILABLE _____

FIN. IN STOCK & REC'D SINCE _____ AMT. _____

AT PSESENT _____

NEEDED ON ORDERS _____ TOTAL USED _____

REMARKS _____

SIGNED _____ DEPT. _____

APPROVED _____

FOR MANUFACTURING DEPT.

APPROVED _____

FOR WORKS

FORM 371

FIGURE No. 99.—Requisition from factories.

with this work is an interesting and pleasant experience and some of the methods used are related here and may be of service to the reader.

The operations of the company covering such a wide area naturally entail the complete separation of all traffic work from the purchasing, and it is a distinct and important department comprising many functions in no way connected with the purchasing department. In fact, its principal work is related to shipments made on account of the sales department. It cannot, therefore, be considered as an integral part of the purchasing activities. An illustration will be given in the next chapter where traffic work is confined practically to purchasing alone and forms a constituent part of that department.

The stores system is, similarly to the traffic work, segregated from the purchasing department and performs its important functions independently. The operations of this purchasing department therefore are confined to buying, and the methods employed are in contrast to the other examples given.

The requisitions from the factories are shown in Figure 99. This form is sufficiently clear and needs no explanation; the arrangement and wording convey to any person with only a rudimentary knowledge of what a requisition is, its import and meaning. It has to be properly authenticated by the parties in authority and when thus validated forms the purchasing agent's authority for placing the order.

Another form of requisition is shown in Figure 100. This is used by all the departments of the undertaking not connected with the actual manufacturing, for

form is used for recording receipt of material which is attached to each invoice as they arrive. The final invoice completing the order is accompanied by the form shown in Figure No. 102.

ORIGINAL

OTIS ELEVATOR COMPANY

ELEVENTH AVENUE AND
TWENTY-SIXTH STREET

NEW YORK

PUT THIS
ORDER NO
ON YOUR
INVOICE

B 55290

121

REC. NO. DEPT

M

RENDER SEPARATE BILL FOR EACH ORDER

PLEASE DELIVER TO OTIS ELEVATOR COMPANY

SHIP VIA

F. O. B.

PLEASE NOTE:

ACKNOWLEDGE AND ADVISE AT ONCE WHEN SHIPMENT WILL BE MADE.
OUR ORDER NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES, AND
BILLS OF LADING AND THE PLACE TO WHICH MATERIAL HAS BEEN SHIPPED
MUST BE STATED ON INVOICE.

SEND INVOICE TO THIS OFFICE, ATTACHING B/L THERETO.

WE WILL NOT IN ANY MANNER BE RESPONSIBLE FOR GOODS DELIVERED
OR WORK DONE FOR OUR ACCOUNT WITHOUT A WRITTEN ORDER.

NO ALLOWANCE FOR BOXING OR CARTAGE.

OTIS ELEVATOR COMPANY.

FORM 1382
REVISED, MAY 1, 1913

PURCHASING AGENT

FIGURE No. 101.—Purchase order.

orders are issued both in New York and by the branch offices which apply on these contracts.

The order form used by the branch offices is shown

FORM 379
(REVISED JULY, 1913)

OTIS ELEVATOR COMPANY

PURCHASE ORDER

OFFICE

NAME

ADDRESS

PLEASE DELIVER TO

BY

DATE

THIS NUMBER

NO.

MUST APPEAR ON BILL OF LADING, SHIPMENTS AND INVOICE

FOR

NO.

QUANTITY AND DESCRIPTION OF GOODS WANTED

ORDERED BY

APPROVED BY

ORIGINAL

FIGURE No. 103.—Purchase order form used by branch offices.

in Figure 83. If the concern with whom the contract is made has local stocks in the cities where branch offices are located, the material is supplied from there,

FORM 495		OTIS ELEVATOR COMPANY		REQUEST FOR QUOTATION	
		OFFICE OF PURCHASING AGENT		NEW YORK	
<hr/>					
PLEASE QUOTE ON THIS SHEET YOUR BEST PRICE F O B <hr/>					
FOR THE ARTICLES SPECIFIED BELOW AND STATE HOW SOON YOU CAN FURNISH THE SAME					
BID ON EACH ITEM SEPARATELY DO NOT FAIL TO SIGN THIS BID					
<hr/>					
				TOTAL	
SIGNATURE <hr/>				REQUISITION No. <hr/>	
ADDRESS <hr/>				PURCHASE ORDER No. <hr/>	

or from the nearest shipping point. A copy of this order is sent to the purchasing department in New York, where a record is kept of the total amount of material obtained on account of the contract.

FORM 654		FOLLOW UP ON MATERIAL ORDERS	
TO _____		DATE _____	
PLEASE ADVISE BELOW WHEN YOU WILL SHIP MATERIAL SPECIFIED ON OUR ORDER DATE _____		OUR NO. _____ YOUR NO. _____ SHOP NO. _____	
OTIS ELEVATOR COMPANY			
_____ OFFICE			
REPLY (DO NOT DETACH FROM ABOVE)			
DATE _____			
WE WILL FURNISH ABOVE MATERIAL			
SIGNED _____			

FIGURE No. 105.—This form is used in following up orders and obtaining from sellers information as to date of shipment.

The branch offices are advised of all contracts made, and all changes and modifications which take place from time to time. As they are engaged in local erection, construction, and repair work, it is an important advantage for them to be able to secure the benefits of these contracts. They are placed in the same position as the largest buyers for such material as they need locally and which can be covered by agreements of this kind. Contracts of this character, which can be arranged by the purchasing agent, are important factors in the general economic operation of the corporation's undertakings.

The invoices for all factory purchases go first to the purchasing department in New York, where they are compared with the order and sent to the factories for approval. A record of the receipt of material is made by the receiving department on the reverse side of their copy of the purchase order (see Figure 102. This copy of the order is then attached to the invoice and returned to the purchasing department. It will be noticed that Figure 102 covers all the necessary data connected with the invoice, such as classification, freight charges, etc. A slip is attached to invoices calling attention to cash discounts, and each person handling them must perform his work to enable payment to be made on date specified. After prices have been checked, the invoices are passed to the accountant's office.

These are the salient features connected with the purchasing system of this undertaking. There are many details associated with it, as there is with any similar work. There are also forms used between the factories, branch offices and purchasing department which it is unnecessary to give here.

CHAPTER XV

PURCHASING FOR CONSTRUCTION WORK AND OPERATION OF PROPERTIES IN WIDELY SEPARATED LOCALITIES

THERE are conditions existing in the work of purchasing which are not covered by the descriptions given in either of the two preceding chapters. As pointed out in earlier portions of this book, there are certain fundamental principles connected with buying which are common to it whenever and wherever its functions are exercised. The methods employed, however, have to be adjusted to meet the varying conditions which surround the work.

The writer has in mind one of the largest engineering concerns in the country with whose purchasing he had the good fortune to be connected. This company has carried out construction contracts in practically every state in the Union, also in Cuba, Central America, the Philippine Islands, and its allied companies have executed contracts in all parts of the world.

They also act as managers and operators of public utility undertakings and many other enterprises, both at home and abroad. In addition to these important functions, there are many companies who find it advantageous to employ them to act as purchasing agents for them on account of the excellent facilities they possess for satisfactorily taking care of such work.

From this short résumé of the activities of the corporation, it can be easily understood that the work of purchasing all the requirements connected with so many undertakings is an exceptionally intricate problem. The proper performance of the work of buying where the conditions and circumstances vary so greatly involves something radically different from the examples given in the two last chapters.

The information which reaches the purchasing office and which primarily forms the basis for the purchase may be in a very incomplete and crude form. This necessitates the apportioning of the work connected with the requisition to an experienced man, who takes all the information furnished and beats it into shape.

The requisition form used (see Figure 107) is much larger than those previously shown, and the clerk in charge has to write up the requisition specifying and minutely describing every detail and particular requisite to insure the purchase being made and the material shipped exactly in accordance with the requirements of the customer for whom they are acting as purchasing agents, or as needed for the execution of work on contracts for construction or operation.

In considering a requisition such as this, the nature and character of the purchases as already outlined must be taken into consideration. It is a foregone conclusion that when the material is to be shipped, perhaps half-way round the world, special care must be taken in making the purchase and having every detail connected with it and its shipment absolutely correct.

All the work connected with traffic problems in this establishment is an integral part of the purchasing department, and all the particulars as to manner of

Trivial purchases, such as frequently occur in local construction and manufacturing work, are not as general in transactions of this purchasing department, but they are large and important and practically all of them are subject to inspection when shipments have to be made great distances. It is easily conceivable that there must be positive safeguards against shipping wrong material, and an endeavor has been made, therefore, to show the necessity of preparing the requisitions so that all questions as to proper description of material, its inspection and routing are adequately covered and accurately specified.

In an office handling such a varied assortment of purchases, the information on file is naturally extensive and diversified. It is not possible, however, nor could it be expected, that the department should know where to buy to the best advantages everything embraced in its multitudinous activities. Nevertheless, it must be in a position to obtain at short notice such information as is essential to enable it to make the purchase intelligently and satisfactorily of anything unusual which it is called upon to buy. As an illustration, the writer remembers having to investigate and find a market in which to purchase machinery for harvesting rice and hemp and preparing them for commercial use. This transaction was for the Philippines, while at the same time mules were being bought for construction work in Tennessee and locomotives for Cuba.

In its completed form and when properly approved, the requisition is ready to be dealt with by the purchasing agent, who scrutinizes it closely, for the magnitude and importance of the expenditures in-

volved would, as already pointed out, entail severe losses, trouble, and inconvenience to both the purchaser and the consignee if the transaction was not properly carried through in consequence of the requisition being carelessly or incorrectly written up.

It is necessary also to verify the authorization of the purchase, and that it is validated by the existing agreements or arrangements for carrying out construction work, management, or operation of properties, or in the performance of the function of purchasing agent for corporations who have not got the requisite facilities for doing such work to the best advantage.

The requisition is then handed to the price clerk who writes up and sends out the invitations to tender. The work in connection with this phase of the purchase, also in comparing quotations and final negotiations before placing the order, does not differ materially from similar work as related in previous chapters. This is also the case with all the features pertaining to the following up of the order, inspecting of the material, and shipment to customer.

A few of the forms used in carrying through the routine work of the department are illustrated in the following pages. The nature of the particular section of the work in which they are used can readily be gathered from an examination of the forms themselves and it is not necessary to detail the method of handling each one.

The system of filing the papers in one of the transactions of the character described has to be radically different from that used by the Underground Railways, where over one hundred orders were frequently issued in one day, many of them having no

Form No E 301 P A 3M-1-12-16.

REQ NO.

THE J. G. WHITE ENGINEERING CORPORATION,
ENGINEERS. CONTRACTORS.
—PURCHASING AGENTS—
43 EXCHANGE PLACE NEW YORK, N. Y.
ORDER

ORDER NO.

DATE

ORDERED FOR

TO

MARKS

PLEASE FURNISH THE FOLLOWING ARTICLES SUBJECT TO THE CONDITIONS STATED HEREIN

CONSIGNEE TO

CARE OF

VIA

SHIPMENT MUST BE MADE WITHIN FROM DATE

CONDITIONS	ITEM NUMBER	QUANTITY	ARTICLES AND DESCRIPTION
<div>1. If shipment cannot be made by date specified, notify us at once.</div> <div>2. Order number must be shown on all shipping documents, invoices and correspondence.</div> <div>3. Invoices, as specified below, must be sent to this office as soon as material is shipped from your works. All goods from manufacturers in Greater New York, should be held pending receipt of shipping instructions.</div> <div>4. All material furnished must conform with our SPECIFICATIONS when indicated, and if not in accordance therewith, same will be held at your risk, awaiting disposition. Shippers must pay all transportation charges both ways on all rejected material.</div> <div>5. Inspection by us before shipment does not relieve shipper or manufacturer from responsibility of furnishing material strictly in accordance with specifications.</div> <div>6. All material must be packed securely. Breakage or damage will be charged to shipper.</div> <div>7. No charges allowed for packing, reels or cartage unless specified on this order.</div> <div>8. Form below must be detached, filled out and forwarded to us immediately.</div> <div>9. No drafts will be honored.</div> <div>10. Railroad bill lading showing proper classification, full routing, car number, weights and rates must be sent to (as indicated at top of this order) as soon as shipment is made.</div>			

REQUIRED {

COPIES OF INVOICE

COPIES OF PACKING LIST

TERMS OF PAYMENT

YOURS VERY TRULY

THE J. G. WHITE ENGINEERING CORPORATION,
—PURCHASING AGENT—
Per

DETACH AND MAIL AT ONCE TO

THE J. G. WHITE ENGINEERING CORPORATION,
43 EXCHANGE PLACE,
NEW YORK

ORDER NO.

RECEIPT OF THE ABOVE ORDER IS HEREBY ACKNOWLEDGED. WE ACCEPT THE ORDER AS SPECIFIED.

SIGNED

DATE

FIGURE No. 108.—Purchase order form.

memorandums, quotations, etc., which for easy reference must be kept together. Therefore all papers relating to the order, together with requisition, from

Form No. 325 9000 1 22-13

THE J. G. WHITE ENGINEERING CORPORATION
ENGINEERS CONTRACTORS
43 EXCHANGE PLACE.
NEW YORK.

19

GENTLEMEN:

ORDER No. _____ CONTRACT _____

Please refer to our order of the above number and place hereon, in space allotted below, your very best quotation covering the items included in the order.

Yours very truly,

THE J. G. WHITE ENGINEERING CORPORATION

E. H. CHILSON

MANAGER OF PURCHASES

By _____

THE J. G. WHITE ENGINEERING CORPORATION

GENTLEMEN:

We quote below our very best prices covering the items mentioned on your order of the above number.

Item No.

Unit Price

Total Price

Yours very truly,

FIGURE No. 110.—When an order has been issued without first ascertaining the price, this request is sent to the party holding the order.

the initial stage to its final completion, are kept in a folder. Such a scheme is not feasible or practicable

Form No. 313A 500. 12-3-10

Prints and Specifications to be sent out

To ENGINEERING DEPARTMENT

Date.....Number.....

Order has been placed with.....

For.....

To be used on the.....job

Please see that all the Prints and Specifications covering this work are sent immediately.

Purchasing Department.

Domestic Prints

To PURCHASING DEPARTMENT

Number.....

Prints and Specifications have been forwarded to.....

For.....

To be used on the.....job

Date

Engineering Department.

FIGURE No. 111.—When an order is placed which requires blue prints and specifications this form is sent to the engineering department.

when very large numbers of orders are issued which have few or no papers connected with them to be preserved.

FORM NO. 317. 2M-4-12-11.

INSPECTION NOTICE

CONTRACT.....

ORDER NO.....

ENGINEERING DEPARTMENT

OFFICE

DATE

MANUFACTURER ADVISES THAT MATERIAL ON THE ABOVE
ORDER ^{WILL BE} _{IS} READY FOR INSPECTION AT.....

..... DATE.....

PURCHASING DEPARTMENT

By.....

INSPECTION NOTICE

CONTRACT.....

ORDER NO.....

PURCHASING DEPARTMENT

OFFICE

DATE

WE WILL ^{ARRANGE FOR} _{WAIVE} INSPECTION OF MATERIAL ON THE
ABOVE ORDER.

ENGINEERING DEPARTMENT

By.....

FIGURE No. 112.—When inspection has been specified on order, this form is sent to engineering department.

Form 907-2000-1-22-13

THE J. G. WHITE ENGINEERING CORPORATION
ENGINEERS CONTRACTORS
43 EXCHANGE PLACE,
NEW YORK

RUSH

ORDER TRACER.

NEW YORK. _____

SIR:

ORDER NO. _____ CONTRACT _____

WE MUST BE ADVISED IMMEDIATELY WHEN YOU PROPOSE MAKING SHIPMENT OF THE MATERIAL CALLED FOR

YOURS VERY TRULY,

E. N. CHILSON

MANAGER OF PURCHASES

IF ANY OF THE ABOVE HAS BEEN SHIPPED, PLEASE ADVISE:

DATE OF SHIPMENT _____ SHIPPING POINT _____

CAR INITIALS AND NUMBER _____ VIA _____

EXPRESS _____

REMARKS:

SHIPPER.

DATE _____

FIGURE No. 113.—Form used in requesting information regarding shipment of order.

Form No. 331—2000-8-3-14

MEMORANDUM
TO
ORDER FOLLOW-UP CLERK

ORDER WAS PLACED { BY LETTER
BY TELEPHONE
VERBALLY

DATE _____

WITH _____

MATERIAL _____

CONTRACT _____

SHIPMENT DUE _____

SIGNED _____

Note.—This memorandum is for temporary use in following shipments. After regular order is issued and card is made up, the order number is to be noted below and this memorandum will be filed with the order.

COVERED BY ORDER NO. _____

FOLLOW UP RECORD

FIGURE No. 114.—When an order has been placed verbally and before the official order is issued, this form is used for temporary follow-up purposes.

Form No. 218 314-26-11

MEMORANDUM FOR FIELD OFFICE

CONSTRUCTION OFFICE

DATE _____

GENTLEMEN

Order No. _____ Contract _____

Shipment of material covered by our order of the above number has been ^{MADE} PROMISED
as follows:—

FIGURE No. 115.—Advice to construction office regarding shipment of material.

FORM NO. 217 1000 1-21-12

THE J. G. WHITE ENGINEERING CORPORATION
ENGINEERS CONTRACTORS,
43 EXCHANGE PLACE
NEW YORK

191.

To _____

Please deliver to S.S. _____
now loading at _____
_____ for shipment to _____

Please have all packages marked in full, as per instructions given in our order, take receipt in our name and forward to us when delivery has been made.

Please number packages as follows:

Yours truly,

Manager of Purchases.

FIGURE No. 116.—Advice to supplier regarding shipment of an order by steamship.

FORM NO. 228 800-6 10-13

THE J. G. WHITE ENGINEERING CORPORATION
ENGINEERS CONTRACTORS
43 EXCHANGE PLACE,
NEW YORK

IMPORTANT

NEW YORK, _____ 191

TRACER REQUEST

TO _____

GENTLEMEN:

PLEASE WIRE TRACE SHIPMENT FORWARDED _____

FROM _____ TO _____

VIA _____

CONSISTING OF _____

AS WE ARE ADVISED BY CONSIGNEE UNDER DATE OF _____

THAT SHIPMENT HAS NOT YET BEEN RECEIVED. PLEASE ADVISE IMMEDIATELY BY TELEPHONE OR TELEGRAPH

WAY-BILLING REFERENCES, CONNECTING LINES, DATE OF DELIVERY, ETC.

Very truly yours,

THE J. G. WHITE ENGINEERING CORPORATION
E. N. CHILSON, MANAGER OF PURCHASES
PER _____

FIGURE No. 117.—Tracer request. One of the forms used by the traffic clerk.

Form No. 320 1-22-13

THE J. G. WHITE ENGINEERING CORPORATION
ENGINEERS CONTRACTORS
43 EXCHANGE PLACE
NEW YORK

PURCHASING DEPARTMENT

_____19

GENTLEMEN:

ORDER No. _____ CONTRACT _____

We return herewith your invoices as follows:

<u>Number</u>	<u>Date</u>	<u>Amount</u>
---------------	-------------	---------------

Please follow invoicing instructions on order of the above number, forwarding
invoices and copies in accordance therewith.

Yours very truly,

THE J. G. WHITE ENGINEERING CORPORATION
E. N. CHILSON
MANAGER OF PURCHASES

By _____

FIGURE No. 118.—When invoices are not rendered in accordance with instructions they are returned with this notice.

Form No. 921 5000 10-20-11

MEMORANDUM FOR FIELD OFFICE

INVOICES

DATE.....

CONSTRUCTION OFFICE

GENTLEMEN:

ORDER No. CONTRACT

We attach hereto

of the following invoices to be treated in the usual manner.—

Shipper	Invoice Date	Invoice Amount
---------	--------------	----------------

Discount of.....% applies if payment is made within.....days from.....

Very truly yours,

E. N. CHILSON

Purchasing Agent

By.....

FIGURE No. 119.—Form used in sending invoices to construction offices for approval.

[illegible]

FIGURE No. 121.—Invoice register.

CHAPTER XVI

PURCHASING FOR A SMALL MANUFACTURING PLANT

IN a small manufacturing plant the conditions surrounding the purchasing and store keeping differ somewhat from those previously related. The following brief explanation will serve to illustrate the main features of the system adopted. Owing to the size of the plant and the limited amount of clerical assistance, it had to be simple in the extreme and yet meet the problems of purchasing and store keeping satisfactorily. On this account the forms used were limited in number and any features which might lead to complications or enlarge the work were avoided.

The storeroom was in charge of a man who was honest and reliable, but who was not capable of keeping any of the stores accounting records, which were all kept in the main office. He had no authority to issue purchase requisitions, he received material and supplies, stored them, and delivered them on foremen's requisitions as required, doing the physical work himself with an assistant. If any additional temporary help was needed it was drawn from the shop.

When a production order was issued, the superintendent or his assistant made out a purchase requisition, Figure 122, for the material required. This was in duplicate and both original and copy were sent to the office. Here it was checked up with the stores

FORM 103

PURCHASE REQUISITION

DATE

REQUISITION NO.

REQUIRED FOR

PURCHASE ORDER NO.

DATE WANTED

ORDERED FROM

DESCRIPTION OF MATERIAL

SIGNED

FIGURE No. 122.—Purchase requisition.

perpetual inventory to see whether any of the material in stock could be used for this order. It was then numbered with an automatic numbering stamp and investigations were made as to prices, etc. After the order was placed, the original was kept in the office and the copy returned to the superintendent. On both of them the order number and name of seller were inserted. This fitted in better with the superintendent's method of keeping his records than if a copy of the purchase order had been sent to him, which would only have meant to him an unnecessary addition to his clerical work.

Requisitions for supplies for the shop were issued by the superintendent's assistant when he was notified by the office or by the storekeeper that the stock was running low and had reached the limit fixed. When new machinery was designed, the drafting room made

FORM 128					
MATERIAL					
PURCHASED FROM	DATE	ORDER NO.	DESCRIPTION	PRICE	PER

FIGURE No. 123.—Card for recording prices of material with names of suppliers and order numbers.

out a bill of material and a requisition for it at the same time. These requisitions came into the office and were dealt with in the same manner as those from the superintendent.

A record of quotations and prices paid for previous purchases was kept on a card index, Figure 103. Reference was made to this to ascertain the latest

FORM 106		DAIRY MACHINERY & CONSTRUCTION CO. INC.	
		DERBY, CONN.	
REQ. NO. _____	DATE _____	PURCHASE ORDER NO. 11513	
TO _____			
PLEASE SEND US THE FOLLOWING:			
DAIRY MACHINERY & CONSTRUCTION CO. INC.			
<u>IMPORTANT</u> INVOICES AND SHIPPING RECEIPTS MUST HAVE ORDER NUMBER ENTERED ON THEM AND BE SENT TO US ON DATE OF SHIPMENT			

FIGURE No. 124.—Purchase order form.

price and if no recent quotations had been received, inquiries were sent out for best prices and shipping dates. When a satisfactory price had been secured and shipment promised early enough for the proper execution of the production order, the regular purchase order was issued, Figure 124. A copy of this order was sent to the storekeeper (no price was inserted on this copy); a copy was also kept in the office and bound in a metal post binder.

When the invoice was received, it was checked with the order and a memorandum of the date of invoice, quantity shipped, and amount of invoice was en-

FORM 106					
FROM _____				DATE _____	
PURCHASE ORDER NO.	QUANTITY RECEIVED	DESCRIPTION OF MATERIAL			
RECEIVED AS ABOVE					
QUALITY APPROVED					
PRICE EXAMINED					
EXTENSIONS CHECKED					
CHARGE TO				AMOUNT	
STOCK RECORD				APPROVED	

FIGURE No. 125.—Approval form for invoices.

with list of invoices is made out and not being in order of dates it is not noticed that there are two invoices of the same date and amount. The most effectual method of preventing duplication of this kind is to enter the invoice on the copy of the order in the office. Investigations were then made to see if any questions had arisen regarding the quality which would appear when it was checked against the material-received sheet. It was also checked for price, the extensions were checked, and it was finally approved on a form as shown in Figure 125.

A record of prices was kept on cards similar to Figure 123 and an index was kept of orders placed on a form as shown in Figure 126. The copies of unfilled orders were kept separate from the completed orders and as they were comparatively few a general tickler system was not necessary, as notes could be easily made of follow-up movements on the copies of the orders themselves.

The stores system in connection with this plant was simple in the extreme. The man in charge did no clerical work except make out a list of the material and supplies received on account of purchase orders. A copy of this order was given to him at the time it was issued; he knew therefore what goods were on order, when to expect them, and could stop any coming in which were not properly ordered.

The method of procedure was as follows: The material arrived daily from various sources and on arrival was checked, weighed, and examined by the storekeeper, the copy of the purchase order having of course been referred to. He then entered these items on the material-received sheet, which was sent into the

office every day. He had various shipping memoranda and delivery tickets which came with the goods. These he kept for a time in case any question should arise as to quantities, etc., when invoices were checked.

During the day the storekeeper was called on continually to deliver goods from the storeroom to various departments. This was done by requisition, Figure 127, signed by the foreman. The first thing the storekeeper did on receipt of this requisition was to number it in the top right-hand corner with an automatic numbering stamp. He then handed out the material and signed the ticket below the foreman's signature. The requisitions were placed in a box and sent into the office daily. The object of numbering them was

FORM 101			
REQUISITION ON STOCKKEEPER			
ORDER NO. _____		DATE _____	NO. _____
PIECES	FEET	POUNDS	MATERIAL
ENTERED IN STOCK BOOK _____		FOREMAN _____	
CHARGED TO ORDER _____		STOCKKEEPER _____	

FIGURE No. 127.—Foreman's requisition on storekeeper.

that it proved to the office that if the requisitions were numbered in proper sequence none were lost after material was given out. The foremen could not be depended upon to send copies of requisitions to the office to check with the originals as is frequently done. It was essential therefore that close track be kept of them.

Material returned to stores was recorded in a similar manner, the foremen sending credit memorandums to the storekeeper (see Figure 128).

On arrival in the office these requisitions were charged against the production order and also entered on stores record, Figure 129, which was a loose-leaf sheet. They were then tied in bundles and kept

FORM 163		CREDIT	
GOODS RETURNED TO STOCK ROOM FOR CREDIT			
ORDER NO. _____		DATE _____	NO. _____
PIECES	FEET	POUNDS	MATERIAL
ENTERED IN STOCK BOOK _____		FOREMAN _____	
CREDITED TO ORDER _____		STOCKKEEPER _____	

FIGURE No. 128.—Foreman’s credit requisition for material returned to stores

[illegible]

FIGURE No. 129.—Perpetual stores record.

until there was no possibility of any need to refer to them again.

For the size of the establishment a large number of patterns were in use. A record of these was kept on cards, one being a record of the pattern itself, Figure 131; this was a buff card. The other was light blue, Figure 132, and was used for keeping a record of the foundry the patterns were sent to. Enough particulars are shown in the illustrations of these to make them self-explanatory.

FORM 104	DATE_____191__
TO THE SUPERINTENDENT,	
THE STOCK OF_____	
PATTERN NO._____NOW STANDS AT_____	
THE MINIMUM BEING_____. IT TOOK_____	
TO GET DELIVERY OF LAST LOT PURCHASED.	

FIGURE No. 130.—Storekeeper's notice to superintendent of low stock.

FORM 129

PATTERN NO.	NUMBER OF PIECES IN THE PATTERN.....
DRAWING NO.	NUMBER OF CORE BOXES.....

NAME OF PATTERN.....
.....
.....
.....
.....
.....

OTHER PARTS TO BE AFFIXED TO THIS PATTERN
.....
.....
.....

STORED IN SHELF NO.....

FIGURE No. 131.—Card for keeping record of patterns.

FORM 130

PATTERN NO.....IN SHELF NO.....

NAME OF PATTERN.....

DATE SHIPPED	FOUNDRY	DATE RETURNED	DATE SHIPPED	FOUNDRY	DATE RETURNED

FIGURE No. 132.—Companion card to Figure No. 131 for recording movements of patterns.

INDEX

- Analyses, relation to buying, 92
value of, 90
- Art of Buying, 1
- Buyer and seller, 21
- Buying. (*See also* Purchasing)
literature of, 16
- Catalogue, cases and shelves for
filing, 76, 79
index cards for, 77, 78
numbering and indexing, 76
utility of, 75
- Competitive Bidding, 23
- Costs, as affected by buying, 13,
14, 15
- Contracts, and price fluctuations, 22
and trade price lists, 210
charges in, 206
date of delivery on, 208
definition of, 213
forms of, 137, 138, 139, 140,
141, 142
form of order applying on, 143
record, 144, 145
general remarks, 136
made through agents, 206
offers to, 204
orders and acceptances, 210
payments on, 213
place of delivery on, 208
shipping part only, 212
specifying quality in, 207
time limits on, 205
variation in quantity, 211
- Data, chart of procedure in collect-
ing, 66
collecting and recording, 73
necessary in purchasing office, 74
- Discounts, advantage of securing,
147
reminder form for, 151
- Economics of Purchasing, 9
- Ethical Standards, in purchasing, 19
- Ethics of Buying, 21
buyer and seller, 21
competitive bidding, 23
general remarks, 19
- Freight Charges, checking, 162
- Functional Position of Purchasing, 11
- Influence on Profits, 15
- Information, chart of method for
securing, 30
clerk, 56
which should be on file, 73
- Inspection Report, 157
- Inspection, copy of order, 177
notices, 234
- Inspector, his duties, 58
- Invoice Clerk, his duties, 56, 58
- Invoices, approval of, 164
certifying, 152, 160
checking extensions, 164
checking freight charges on, 162
checking prices on, 161
checking with material received,
158, 159, 160
checking with order, 155
classification, 164
debits against, 163
discount on, 151
form for certifying, 153, 154
general remarks, 147, 148
methods of handling, 146
not rendered as instructed, 239

- Invoices,
 - preliminary work on, 151
 - record, 150, 152, 242
 - recording, 149
- Legal Aspects of Purchasing, 203
- Literature of Buying, 16
- Misrepresentation, and its results, 22
- Offer system on buying, 24,
- Order Clerk, 58
- Orders, acknowledgement of, 125
 - chart of procedure in placing, 67
 - emergency, 134
 - filing, 116, 131
 - following up, 117, 125, 126, 127, 129, 222, 235
 - forms for branch offices, 220
 - forms of, 118, 119, 121, 122, 123, 124, 130, 218, 230, 246
 - method of handling, 114
 - obtaining price after placing, 232
 - record of, 224, 241, 248
 - recording shipments on, 128, 130, 132, 133, 156
 - work connected with, 114
- Organization, chart of, 57
 - information clerk, 56
 - inspectors, 58
 - invoice clerks, 58
 - linking up employees, 55
 - of department, 53
 - personnel of, 53
 - price clerk, 57
 - requisition clerk, 56
 - storekeeper, 59
 - traffic clerk, 58
- Patterns, form for recording, 254, 255
 - storing, 253
- Payments, advantages of prompt, 23
- Personality in buying, 7
- Philosophy, disadvantage of buying
 - from one source, 6
 - obtaining right material, 5
- Philosophy,
 - of buying, 4
 - price and quality considered, 4
- Price Clerk, 57
- Prices, checking on invoices. (*See* Invoices)
- fluctuations in, 22
- obtaining after order is placed, 232
- Principles, of purchasing, 1
- Profits, influenced by buying, 15
- Prompt Payments, 23
- Purchases, made in the past, 82
 - nature of, 31
 - recording, 83, 84, 85
 - substitutes offered for, 34
- Purchasing Agent, character and
 - make up, 28
 - authority of, 212
 - definition of authority, 36
 - diagram of his work, 35
 - factors and conditions connected with his work, 26
 - functions covered by his activities, 34
 - matters on which he should be posted, 29
 - relations with other departments, 38
 - synopsis of information necessary to, 30
- Purchasing, an interesting economic study, 9
 - art of, 1
 - comparison of inefficient and competent methods, 3
 - ethical standards in, 19
 - functional position of, 11
 - influence on profits, 15
 - literature on, 16
 - personality in, 7
 - philosophy of, 4
 - principles of, 1
 - relation to cost and selling, 13
 - some present-day methods, 8
 - success due to, 11

- Purchasing Department, chart of
 functional organization, 48
communications between departments, 40
employees of, 45
inspection division of, 50
looking up employees, 55
organization of, 53
origin of, 41, 53
personnel of, 53
receiving division of, 50
relations with other departments, 46
size of, 44
sphere of usefulness, 41
stores division of, 50
subdivisions of, 47
- Quotations, comparison of, 111
 declining, 112
 form for obtaining, 104, 107, 108, 220
 keeping record of, 89
 negotiations regarding, 110
 obtaining, 103
 tabulating, 90
 telephone request for, 109
- Receiving material, records of, 128, 130, 133
- Records, analyses of, 92
 inspection reports, 92
 past purchases, 82, 83, 84
 purchase orders, 85, 86, 88
 quotations, 89, 90
 sources of supply, 78
 specifications, 89
 tabulating, 73
 tests, 92
- Refusal to sell, 210
- Relation, of buying to costs, 13
- Requisition Clerk, 56
- Requisitions, chart of procedure, 67
 factory, 95
 forms of, 96, 97, 99, 102, 105, 106, 215, 217, 227, 244
- Requisitions,
 pricing, 101
 Remarks regarding, 94
- Returnable packages, 211
- Scrap, disposal of, 199, 201
- Sellers, recording standing of, 80, 81
- Selling Prices, in relation to buying, 16
- Sources of Supply, form for recording, 81, 94
 necessity for information of, 78
- Specifications, essential to good buying, 2
 importance of proper, 89
 standardizing, 91
- Storekeeper, his duties defined, 59
- Stores, accounts, 189
 bin tickets, 195
 budget system, 187
 controlling maximum and minimum, 198, 200, 253
 credits to, 183, 184, 251
 deliveries from, 181
 inventory, 190, 192, 193, 194, 258
 material required for, 185, 186, 188
 operation of, 166
 proper facilities, 179
 receiving material into, 167, 168, 169 170
 receiving report, 173, 174, 175, 176, 178
 requisition on, 180, 181, 182, 250
 tickler systems, 196, 197
- Supplies, standardizing, 43, 91
- System of Procedure, chart dealing with invoices, 68
 chart of stores, 70
 chart of system, 66
 chart purchasing, 67
 in collecting data and information, 65
 in dealing with invoices, 69
 in purchasing, 67

System of Procedure,
 inspection, 71
 in stores, 69
 traffic, 71

Tabulation of bids, form for, 100

Testing materials, value of, 92

Tickler Systems, 125, 126, 127

Traffic clerk, 58

Traffic, division of purchasing de-
partment, 49

 economic possibilities, 49

 method of procedure, 50

 tracer request, 238

BUSINESS BOOKS

We have on our shelves the
noteworthy publications of
all publishers of books on

Accounting

Collections

Advertising

General Business

Business Law

Salesmanship

Credits

Scientific Management

and other subjects of inter-
est to the business man.

Inquiries by mail, telephone, or in
person, will receive prompt, courte-
ous, and careful attention, and de-
scriptive catalogs mailed on request.

D. VAN NOSTRAND COMPANY

PUBLISHERS AND BOOKSELLERS

8 WARREN STREET - - NEW YORK

LIBRARY OF CONGRESS



0 040 055 009 8